



U.S. Department of Transportation

National Highway Traffic Safety Administration

#### Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

\*\*\* \*\*\* \*\*\*



U.S. Department of Transportation
National Highway Traffic Safety
Administration

## **CASE SUMMARY**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

PSU 49 CASE NO. 120A TYPE OF ACCIDENT

# A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

(Provide a summary of the accident sequence as well as any particular event of the accident that is noteworthy. Injury mechanism and vehicle crashworthiness is the focus, not driver culpability. Do not include any personal identifiers.)

See Attachment.

B. VEHICLE PROFILE(S)						
	Class	re Damage cle Inspection	Carranant			
Vehicle No.	of Vehicle	Year/Make/Model	Damage Plane	Severity Description	Component Failure	
		·				

DO NOT SANITIZE THIS FORM

	C. PERSON PROFILE(S)						
Vehicle	Most Severe Injury nicle Person Seat Restraint (TO BE COMPLETED BY ZONE CENTER)				Injury ZONE CENTER)		
No.	Role	Position	Use	Body Region	Injury Type	AIS	Injury Source
			·				
				<b>~</b> .			
	•						
	·						

### **Body Region**

Abdomen Ankle—foot Arm (upper)

Back-thoracolumbar spine

Brain Chest Ears Eye Elbow Face Forearm

Head — skull Heart Kidneys Knee

Leg (lower) Liver

Lower limbs(s) (whole or unknown part)

Mouth

Neck-cervical spine

Nose

Pelvic-hip

Pulmonary-lungs

Shoulder Spleen Thigh

Thyroid, other endocrine gland Upper limb(s) (whole or unknown

part) Vertebrae Whole body Wrist-hand

#### **Injury Type**

Abrasion Amputation Avulsion Burn Concussion Contusion Crush

Detachment, separation

Dislocation

Fracture

Fracture and dislocation

Laceration Other

Perforation, puncture

Rupture Sprain Strain

Total severance, transection

Unknown

### Abbreviated Injury Scale

(1) Minor injury

(2) Moderate injury

(3) Serious injury

(4) Severe injury

(5) Critical injury

(6) Maximum (untreatable)

(7) Injured, unknown severity

DO NOT SANITIZE THIS FORM

PSU49 1995 Case Summary Form CASE 120A TYPE OF ACCIDENT: CAR/VAN/CAR - RIGHT ANGLE

## A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

Vehicle 1 was traveling north approaching an intersection. Vehicle 2 was traveling east and vehicle 3 was traveling west. At the intersection, the front of vehicle 2 impacted the left side of vehicle 1. Vehicle 1 continued and impacted the left front to the left front of vehicle 3. The LR tire and wheel from vehicle 1 seperated from the vehicle and impacted the left side of vehicle 3. Then the LR hub of vehicle 1 impacted a curb on the northeast corner of the intersection and came to rest. Vehicles 1 & 2 were towed and vehicle 3 was driven. The driver of vehicle 1 was fatally injured.

PSU49

1995 Case Summary Form

CASE 120A

TYPE OF ACCIDENT: CAR/VAN/CAR - RIGHT ANGLE

### B. VEHICLE PROFILE(S)

e h. No	Class of Vehicle	Year/Make/ Model	Damage Plane	Severity Descr.	Component Failure	
01	Compact	1992/Chevrolet/Camaro	Left	Severe	None	
02	Large Van	1995/Ford/Econoline	Front	Unk	None	
03 01	Compact	1987/Pontiac/Sumbird	Left	Minor	None	

PSU49

1995 Case Summary Form

CASE 120A

TYPE OF ACCIDENT: CAR/VAN/CAR - RIGHT ANGLE

## C. PERSON PROFILE(S)

٧							
e h. No	Person Role	Seat Positon	Restraint Use	Body Region	In.jury Type	A I S	Injury Source
01	Driver	LF	L&S air bag	Aorta	Transec- tion	6	Door surface
02	Driver	LF	L&S air bag		None		
	Pass	RF	L&S		None		

03 Non-tow

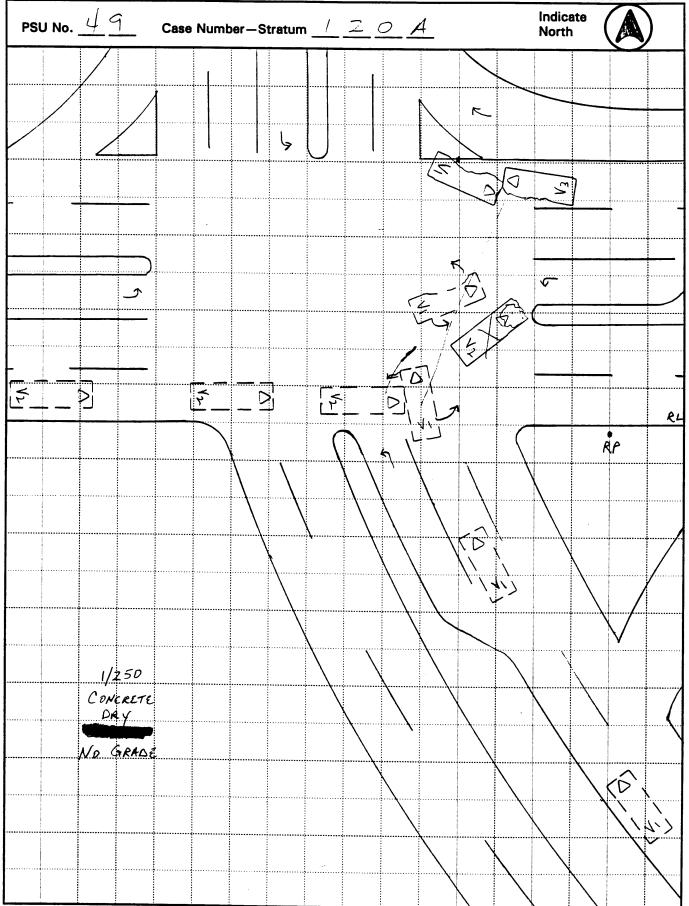


U.S. Department of Transportation

## **ACCIDENT COLLISION DIAGRAM**

National Highway Traffic Safety Administration

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM



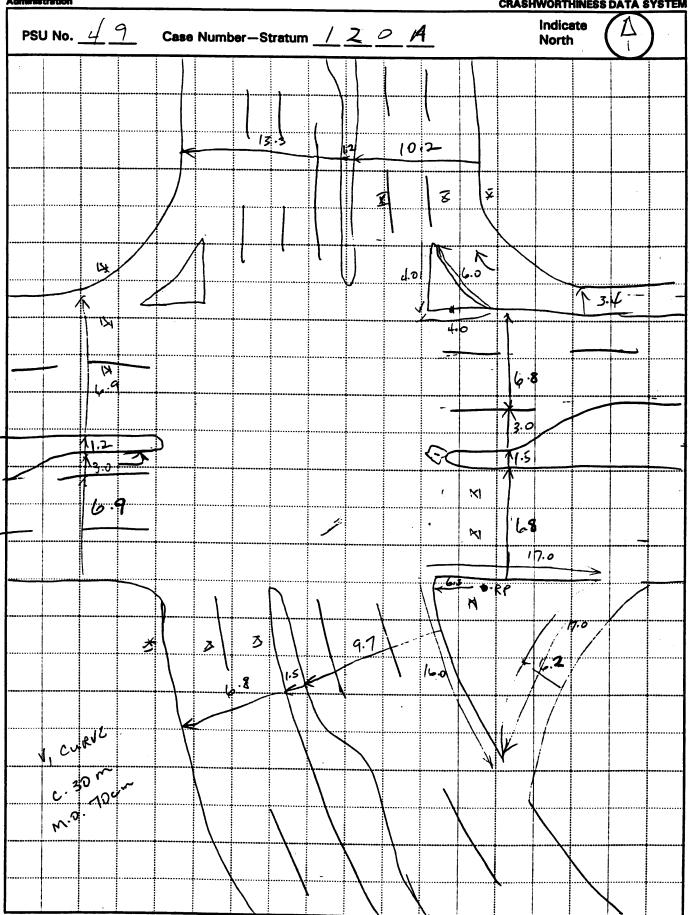


HS Form 431B (1/95)

## **ACCIDENT COLLISION DIAGRAM**

National Highway Traffic Safety Administration NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

Scale: 1 centimeter = \_





ACCIDENT COLLISION U.S. Department of Transportation NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM MEASUREMENT TABLE National Highway Traffic Safety Administration Case Number - Stratum / Primary Sampling Unit Number ACCIDENT COLLISION DIAGRAM CRASH DATA Document vehicle dynamics including: Document the physical plant: VEH. #1 VEH. #2 VEH. #3 reference point and reference line relative \* all road/roadway delineation (e.g., to physical features present at the scene curbs/edge lines, lane markings, median markings, pavement markings, parked Heading Angle scaled documentation of all accident vehicles, poles, signs, etc.) induced physical evidence. all traffic controls (e.g., speed limit) Surface Type scaled documentation of all roadside objects contacted · north arrow placed on diagram Surface Condition scaled representations of the vehicle(s) at roadway surface type and condition of pre-impact, impact, and final rest based applicable roadways Coefficient of upon either: **Friction** grade measurements for all applicable a) physical evidence, or roadways and at location of rollover Grade (v/h) initiation b) reconstructed accident dynamics Measurement (between impact · roadway curvature and final rest) Grade (v/h) Measurement (at location of rollover initiation) Pre-impact Reference line LOUTH ENGE OF SIGNA LIGHT POIS

Reference Point: SIGNAL LIGHT POLE	Reference line: South Bode of LAST				
ON SE CORMER	Bown				
ltem	Distance and Direction from Reference Point	Distance and Direction from Reference Line			
RP	0	.9			
BEGIN SCRAPE LR V	13.6 W	4.5 N			
END SCRAPE LR V	12.9 W	5.1 N			
V2 FLUID SPILL	6.5 W	1.5 N			
ISLAND CURB IMPACT	10.0 W	177 N			
EASTERN POINT OF IMPACTED ISLAND	8-6 W	71 N			
END CAN TOWN					
1					

ltem	Distance and Direction from Reference Point	Distance and Direction from Reference Line
	·	
		-
		·

U.S. Department of Transportation. National Highway Traffic Safety Administration

## **ACCIDENT FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

	,10				
1. Primary Sampling Unit Nur	mber 4				
2. Case Number - Stratum	120A				
IDENTIFICATION					
3. Number of General Vehicle Forms Submitted	03				
4. Date of Accident (Month,Day,Year)	9 5				
5. Time of Accident	0741				
Code reported military time of accident.					
NOTE: Midnight = 2 Unknown = 9					
the state of the s					

SPECIAL	STUDIES	- INDICA	TORS
SI LUINI	- 01001110		

Check ( ) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6 SS15 Adr	ministrative Use	0
(Data for this	lestrian Crash Data Study s special study available	
in a separate SS17 Imp		0
9 SS18 Una	safe Driver Actions	0
•		

## NUMBER OF EVENTS

11. Number of Recorded Events in This Accident

04

Code the number of events which occurred in this accident.

## ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object in the right columns.

·				And the second s		
Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>O</u> <u> </u>	14. 0.2	15	16. <u>0</u> <u>2</u>	17. 2 1	18. <u> </u>
19. 0 2	20. 0	21. <u>0 2</u>	22. <u>L</u>	23. <u>03</u>	24. <u>0 Z</u>	25
26. 0 3	27. <u>D</u> <u>3</u>	28. <u>0 2</u>	29. <u>L</u>	30.	31. <u>0</u> <u>0</u>	32
33. <u>0 4</u>	34. <u>D</u>	35. <u>0</u> 2	36. <u>L</u>	37. <u>63</u>	38. <u>O</u> O	39. <u> </u>
40. 0 5	41	42	43	44	45	46

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT



#### **CODES FOR CLASS OF VEHICLE** (31) Large pickup truck (≤ 4,500 kgs GVWR) (00) Not a motor vehicle (01) Subcompact/mini (wheelbase < 254 cm) (38) Other pickup truck (≤ 4,500 kgs GVWR) (02) Compact (wheelbase ≥ 254 but < 265 cm) (39) Unknown pickup truck type (≤ 4,500 kgs GVWR (45) Other light truck (≤ 4,500 kgs GVWR) (03) Intermediate (wheelbase ≥ 265 but < 278 cm) (48) Unknown light truck type (≤ 4,500 kgs GVWR) (04) Full size (wheelbase ≥ 278 but < 291 cm) (49) Unknown light vehicle type (05) Largest (wheelbase ≥ 291 cm) (50) School bus (excludes van based)(> 4,500 kgs GVWR) (09) Unknown passenger car size (58) Other bus (> 4,500 kgs GVWR) (14) Compact utility vehicle (59) Unknown bus type (15) Large utility vehicle (≤ 4,500 kgs GVWR) (16) Utility station wagon (≤ 4,500 kgs GVWR) (60) Truck (> 4,500 kgs GVWR) (67) Tractor without trailer (19) Unknown utility type (20) Minivan (≤ 4,500 kgs GVWR) (68) Tractor-trailer(s) (21) Large van (≤ 4,500 kgs GVWR) (78) Unknown medium/heavy truck type (24) Van Based school bus (≤ 4,500 kgs GVWR) (79) Unknown light/medium/heavy truck type (28) Other van type (≤ 4,500 kgs GVWR) (80) Motored cycle (29) Unknown van type (≤ 4,500 kgs GVWR) (90) Other vehicle (99) Unknown (30) Compact pickup truck (≤ 4,500 kgs GVWR) **CODES FOR GENERAL AREA OF DAMAGE (GAD) CDS APPLICABLE** (R) Right side (T) Top (O) Not a motor vehicle (U) Undercarriage AND OTHER (N) Noncollision (L) Left side (9) Unknown **VEHICLES** (F) Front (B) Back (0) Not a motor vehicle (L) Left side (C) Rear of cab TDC APPLICABLE (N) Noncollision (B) Back of unit with cargo area (V) Front of cargo area (T) Top **VEHICLES** (F) Front (rear of trailer or straight truck) (U) Undercarriage (R) Right side (D) Back (rear of tractor) (9) Unknown CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED (01-30) - Vehicle Number (57) Fence (58) Wall Noncollision (59) Building (31) Overturn - rollover (excludes end-over-end) (60) Ditch or culvert (32) Rollover - end-over-end (61) Ground (33) Fire or explosion (62) Fire hydrant (34) Jackknife (63) Curb (35) Other intraunit damage (specify): (64) Bridge (68) Other fixed object (specify): (36) Noncollision injury (38) Other noncollision (specify): (69) Unknown fixed object (39) Noncollision — details unknown Collision with Nonfixed Object (70) Passenger car, light truck, van, or other vehicle Collision With Fixed Object not in-transport (41) Tree (≤ 10 cm in diameter) (71) Medium/heavy truck or bus not in-transport (42) Tree (> 10 cm in diameter) (72) Pedestrian (43) Shrubbery or bush (73) Cyclist or cycle (44) Embankment (74) Other nonmotorist or conveyance (45) Breakaway pole or post (any diameter) (75) Vehicle occupant Nonbreakaway Pole or Post (76) Animal (50) Pole or post (≤ 10 cm in diameter) (77) Train (51) Pole or post (> 10 cm but ≤ 30 cm in diameter) (78) Trailer, disconnected in transport (52) Pole or post (> 30 cm in diameter) 779) Object fell from vehicle in-transport (53) Pole or post (diameter unknown) (88) Other nonfixed object (specify): LA TIRE & WHEEL FROM (54) Concrete traffic barrier (89) Unknown nonfixed object (55) Impact attenuator (56) Other traffic barrier (includes guardrail) (98) Other event (specify):

(99) Unknown event or object

(specify):

## National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

Natio	onal Accident Sampling System-Crashworthine	ss Dat	a System: General Vehicle Form	Page 2
19.	PRECRASH ENVIRONMENTAL DATA  Relation To Interchange Or Junction (0) Non-interchange area and non-junction (1) Interchange area related	2	25. Roadway Surface Condition (1) Dry (2) Wet (3) Snow or slush (4) Ice	
	Non-Interchange junctions (2) Intersection related (3) Driveway, alley access related (4) Other junction (specify)		(5) Sand, dirt, or oil (8) Other (specify): (9) Unknown	J
	(5) Unknown type of junction		26. Light Conditions (1) Daylight (2) Dark	
20.	(9) Unknown Trafficway Flow	(	(3) Dark, but lighted (4) Dawn (5) Dusk (9) Unknown	
	<ul><li>(0) Not physically divided (two way traffic)</li><li>(1) Divided trafficway-median strip without positive barrier</li></ul>		27. Atmospheric Conditions	$\bigcirc$
	<ul><li>(2) Divided trafficway-median strip with positi barrier</li><li>(3) One way traffic</li></ul>	ive	(0) No adverse atmospheric-related driving conditions (1) Rain	<u> </u>
21.	(9) Unknown  Number Of Travel Lanes	3	(2) Sleet/hail (3) Snow (4) Fog	
	<ul><li>(1) One</li><li>(2) Two</li><li>(3) Three</li><li>(4) Four</li></ul>	<u> </u>	<ul><li>(5) Rain and fog</li><li>(6) Sleet and fog</li><li>(7) Other (e.g., smog, smoke, blowing sand dust, etc.) (specify):</li></ul>	or
	<ul><li>(5) Five</li><li>(6) Six</li><li>(7) Seven or more</li><li>(9) Unknown</li></ul>		(9) Unknown 28. Traffic Control Device	1
22.	Roadway Alignment	2	(0) No traffic control(s) (1) Traffic control signal (not RR crossing)	
	<ul><li>(1) Straight</li><li>(2) Curve right</li><li>(3) Curve left</li><li>(9) Unknown</li></ul>		Regulatory (2) Stop sign (3) Yield sign (4) School zone sign (5) Other regulatory sign (specify):	
23.	Roadway Profile (1) Level (2) Uphill grade (>2%) (3) Hill crest (4) Downhill grade (>2%)		<ul> <li>(6) Warning sign (not RR crossing)</li> <li>(7) Unknown sign</li> <li>(8) Miscellaneous/other controls including RR controls (specify):</li> </ul>	
	(5) Sag (9) Unknown		(9) Unknown	
24.	Roadway Surface Type (1) Concrete (2) Bituminous (asphalt) (3) Brick or block (4) Slag, gravel, or stone (5) Dirt (8) Other (specify): (9) Unknown		29. Traffic Control Device Functioning (0) No traffic control device (1) Traffic control device not functioning (specify):  (2) Traffic control device functioning properly (9) Unknown	<u>Z</u>

National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

Page 5

		·	VIII 0 WILL 0 10 0
	OCCUPANT RELATED	44.	Vehicle Cargo Weight Onearest O, O O
37.	Driver Presence in Vehicle		10 kilograms.
	(0) Driver not present		(000) Less than 5 kilograms
1	(1) Driver present (9) Unknown	İ	(450) 4,500 kilograms or more (999) Unknown
	(5) Chichewit		(999) OTIKTOWT , lbs X .4536 = , kgs
38.	Number of Occupants This Vehicle	l	
	(00-96) Code actual number of occupants		Source:
1	for this vehicle		ROLLOVER DATA
	(97) 97 or more (99) Unknown		0.0
	- 1	45.	Rollover (20) No rellever (20 overturning)
39.	Number of Occupant Forms Submitted		(00) No rollover (no overturning)
	AIR BAG RELATED	,,	Rollover (primarily about the longitudinal axis)
		,,,	01-16) Code the number of quarter turns (17) Rollover, 17 or more quarter turns
40.	Is this an AOPS Vehicle?		(specify):
	(0) No (includes unknown) (1) Yes - researcher determined		(98) Rolloverend-over-end (i.e., primarily
	(2) VIN determined air bag system	ļ	about the lateral axis) (99) Rollover (overturn), details unknown
	(3) VIN determined automatic (passive) belts	1	(33) Honover (overtain), details disknown
	(4) VIN determined air bag and automatic	46.	Rollover Initiation Type
l	(passive) belts	l	(00) No rollover
41.	Air Bag(s) Deployment, First Seat Frontal	Ì	(O1) Trip-over (O2) Flip-over
1	(0) Not equipped or not available		(03) Turn-over
	(1) No air bags deployed		(04) Climb-over
ļ	Single Air Bag Vehicle		(05) Fall-over (06) Bounce-over
	(2) Driver air bag deployed (3) Driver air bag, unknown if deployed		(07) Collision with another vehicle
		1	(08) Other rollover initiation type specify):
	Multiple Air Bag Vehicle (4) Driver side only deployed		(00) D-II
	(5) Passenger side only deployed		(98) Rolloverend-over-end (99) Unknown rollover initiation type
1	(6) Driver and passenger side deployed	١.	(55) Chichetti Tollovei illitiation type
	(7) Driver and passenger side unknown if deployed	47.	Location of Rollover Initiation
	(8) Air bag(s) deployed, details unknown		(0) No rollover (1) On roadway
	(9) Unknown	1	(2) On shoulder—paved
1	Air Bon/o) Donloumont Other There Since	1	(3) On shoulder—unpaved
42.	Air Bag(s) Deployment, Other Than First  Seat Frontal	1	(4) On roadside or divided trafficway median
	(0) Not equipped with an "other" air bag		(8) Rolloverend-over-end (9) Unknown
	(1) Deployed during accident (as a result of		<b>^ ^</b>
	impact) (2) Deployed inadvertently just prior to accident	48.	Rollover Initiation Object Contacted
1	(3) Deployed, details unknown	1	(Note: Applicable codes on back of page)
1	(4) Deployed as a result of a noncollision event	49.	Location on Vehicle Where Initial Principal
1	during accident sequence (e.g., fire, explosion, electrical)		Tripping Force Is Applied
	(5) Unknown if deployed		(0) No rollover (1) Wheels/tires
Į	(7) Nondeployed		(2) Side plane
	(9) Unknown		(3) End plane
1	Specify type of "other" air bag present:		(4) Undercarriage
1	The state of the s		(5) Other location on vehicle (specify):
1			(6) Non-contact rollover forces (specify):
	•	_	(8) Rolloverend-over-end
	VEHICLE WEIGHT ITEMS		(9) Unknown
	1 .		Direction of Initial Pall
43		<sup>30</sup> .	Direction of Initial Roll  (O) No rollover
1	Code weight to nearest		(1) Roll right - primarily about the longitudinal
	10 kilograms. (045) Less than 450 kilograms	7.	axis
	(610) 6,100 kilograms or more	1	(2) Roll left - primarily about the longitudinal axis
1	(999) Unknown 		(8) Rolloverend-over-end
1	3.103 lbs X .4536 = $1.408$ kgs		(9) Unknown roll direction
	Source:		

## **CODES FOR ROLLOVER INITIATION OBJECT CONTACTED**

(00) No rollover (01-30) — Vehicle Number	(57) Fence (58) Wall
Nicos and Company	(59) Building
Noncollision	(60) Ditch or culvert
(31) Turn-over — fall-over	(61) Ground
(32) No rollover impact initiation (end-over-end)	(62) Fire hydrant
(34) Jackknife	(63) Curb
	(64) Bridge
Collision With Fixed Object	(68) Other fixed object (specify):
(41) Tree (≤ 10 cm in diameter)	
(42) Tree (> 10 cm in diameter)	(69) Unknown fixed object
(43) Shrubbery or bush	•
(44) Embankment	Collision with Nonfixed Object
, · · , = · · · = · · · · · · · · · · ·	(70) Passenger car, light truck, van, or other
(45) Breakaway pole or post (any diameter)	vehicle not in-transport
( 10) Districted point of poor (all) districted	(71) Medium/heavy truck or bus not in-transport
Nonbreakaway Pole or Post	(76) Animal
(50) Pole or post (≤ 10 cm in diameter)	(77) Train
(51) Pole or post ( $\geq$ 10 cm but $\leq$ 30 cm in	(78) Trailer, disconnected in transport
diameter)	(79) Object fell from vehicle in-transport
	(88) Other nonfixed object (specify):
(52) Pole or post (> 30 cm in diameter)	(66) Other hornixed object (specify).
(53) Pole or post (diameter unknown)	(00) Unknown nonlived object
(EA) Compress smalling housing	(89) Unknown nonfixed object
(54) Concrete traffic barrier	(00) Oak (
(55) Impact attenuator	(98) Other event (specify):
(56) Other traffic barrier (includes guardrail)	
(specify):	(99) Unknown event or object
•	



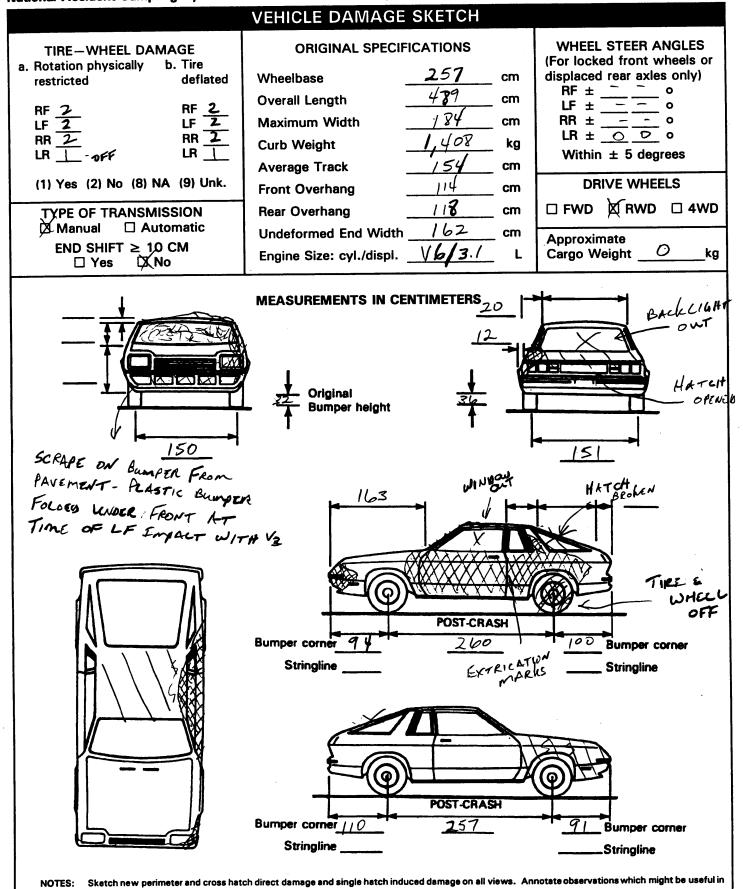
U.S. Department of Transportation

National Highwa Administration	ay Traffic Safety	EX	<b>TERIOR</b>	VEHIC	LE FC	)RM	NATI	CRASHW	CIDENT SA ORTHINES	AMPLING S S DATA S	YSTEM
1. Primar	y Sampling Unit Nun Number - Stratum		201	<del>'-</del>	Vehicle	Number				_0_	
	<u> </u>	٧	'EHICLE	IDENTIF	ICATIO	ON					
VIN _/_	GIFPZ	2 3 T	× M		-					er <u>9</u>	2
Vehicle Ma	ake (specify):	EVROLLT	- 	\	/ehicle N	Aodel (sp	ecify): _	CAM	4RO		
			L	OCATO	R						
Locate the	end of the damage amaged axle for side	with respec				center li	ne or bu	imper c	orner fo	r end im	pacts
Specific Impa	ct No. Location o	f Direct Damag			Location		<u></u>			Max Crus	
1	BUGINS 300	en BACK H	CAXLE	BEGINS Z	1cm B	Ach Lf	AXLE	207	can Bf	ch LF	Axer
2	Broins 430	n FORWARD	LFARE	BEGINS 3	31cm Fe	ORWHLO	LF AXO	E 690	in fish	war U	AXIE
										411	
			SH PROF								
s 	dentify the plane at sill, etc.) and label ad Measure C1 to C6 fr mpacts.	djustments (	e.g., tree	space).							above
t S	Free space value is on the individual C locate side taper, etc. Rec	tions. This ord the valu	may include for each	de the foll C-measu	lowing: rement	bumper and max	iead, bu kimum d	ımper ta	oody co aper, sic	ntour tal le protru	ken at
	Use as many lines/co	Direct D		to describ	e each c	amage	profile.				:
Specific Impact Number	Plane of Impact C-Measurements	Width (CDC)	Max Crush	Field L	C <sub>1</sub>	C <sub>2</sub>	C3	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	±D.
	LEFT	283	C3	292	8	28	56	48	38	6	-42
	FREE SPACE				ス	2	2	2	2	2	
	RESULTANT			<u> </u>	6	26	54	46	36	4	
									\ \ -	Desile	

Number	C-Measuroments	(CDC)	Crush								
1	LEFT	283	C3	292	8	28	56	48	38	6	-42
	FREE SPACE				ス	2	2	2	2	2	
	RESULTANT			1	6	26	54	46	36	4	
					* C4	PRATEC	TED D	ne TO	DOOR	BEING	).
									TRICA		-
		· ·									
		1									
2	LEFT (FRONT)	51	C4	64	4	10	15	19	13	19	#199
	<b>EREESPACE</b>				2	Z	2	2	2	6	
	RESULTANT				2	8	13	17	11	/3	
		<u> </u>				·					
										,	

# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>/ O / . O</u> inches	x 2.54	=	257cm
Overall Length	<u> 192.6</u> inches	x 2.54	=	<u> 489</u> cm
Maximum Width	72.4 inches	x 2.54	=	<u> 1 8 4 cm</u>
Curb Weight		x .4536	=	1,408 kg
Average Track	<u>60.5</u> inches	x 2.54	=	<u> 1</u> 5 √ cm
Front Overhang	inches	x 2.54	=	cm
Rear Overhang	iinches	x 2.54	=	cm
Undeformed End Width	inches	x 2.54	=	cm
Engine Size: cyl./displ.	cc	x .001	=	
	CID	x .0164	=	



reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

HS Form 435B (2b) (1/95)

received on the back of this page.

	CDC WOF	RKSHEE	Γ
	CODES FOR OBJE	CT CONT	ACTED
(01-30)	- Vehicle Number		Fence
(0.007)		(58)	Wall
Noncolli	ision		Building
(31)	Overturn - rollover (excludes end-over-end)	(60)	Ditch or culvert
	Rollover - end-over-end	(61)	Ground
	Fire or explosion	(62)	Fire hydrant
	Jackknife	(63)	Curb
	Other intraunit damage (specify):	(64)	Bridge
		(68)	Other fixed object (specify):
	Noncollision injury		
(38)	Other noncollision (specify):	(69)	Unknown fixed object
(39)	Noncollision — details unknown	Collisio	n with Nonfixed Object
(00)	Tronomicon detaile dimine m		Passenger car, light truck, van, or other
Collision	n With Fixed Object		vehicle not in-transport
	Tree (≤ 10 cm in diameter)	(71)	Medium/heavy truck or bus not in-transpor
	Tree (> 10 cm in diameter)	(72)	Pedestrian
	Shrubbery or bush		Cyclist or cycle
	Embankment	(74)	Other nonmotorist or conveyance
(AE)	Breakewey note or nost (any diameter)	(75)	Vehicle occupant
(45)	Breakaway pole or post (any diameter)		Animal
Manhaa	alianiani Dala ar Dast		Train
Nonbrea	akaway Pole or Post		Trailer, disconnected in transport
(50)	Pole or post (≤ 10 cm in diameter)		Object fell from vehicle in-transport
(51)	Pole or post (> 10 cm but ≤ 30 cm in		Other nonfixed object (specify):
(F.O)	diameter)	(00)	Other hormxoa object (apochy)
	Pole or post (> 30 cm in diameter) Pole or post (diameter unknown)	(89)	Unknown nonfixed object
(30)	Total of poor (diameter dimension)	(,	
(54)	Concrete traffic barrier	(98)	Other event (specify):
(55)	Impact attenuator		
(56)	Other traffic barrier (includes guardrail) (specify):	(99)	Unknown event or object
Accident	DEFORMATION CLASSIFIC  (1) (2)  Direction Incremental		EVENT NUMBER  (4) (5) Specific Specific (6) oppitudinal Vertical or Type of (7)

		DEFORMA	HON CLASS	SIFICATION	BY EVENI N (4)	(5)		
Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	Specific Longitudinal or Lateral Location	Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
0 1	D 2	320	00	<u>L</u>	<u>D</u>	A	W	04
02	03	300	00	<u></u>	F	E	$\underline{\omega}$	02
04	<u>63</u>	270	00	<u>_</u>	B	$\underline{\omega}$	$\overline{\mathcal{N}}$	01
							-	
					<del></del>			
						<del></del>		

		COLLISION	DEFORMA	TION CLAS	SIFICATIO	V				
HIGHEST	DELTA "V"									
Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent			
4. <u>0</u> <u> </u>	5. <u>0</u> <u>Z</u>	6	7. <u> </u>	8. <u>D</u>	9. <u>A</u>	10. <u>ω</u>	11. 0 4			
Second High	Second Highest Delta "V"									
12.02	13. <u>0</u> 3	14. 1 0	15. <u> </u>	16. <u> </u>	17. <u>E</u>	18. <u></u>	19. 0 2			
		CRUS	H PROFILE	IN CENTIM	ETERS					
	The crush pro in the appr	file for the dan opriate space l	nage described below. (ALL N	in the CDC(s)	above should S ARE IN CEN	be documente	d			
HIGHEST I	DELTA "V"									
20. 	21. 				С <sub>Б</sub>	C <sub>6</sub>	22. 			
<u> 292</u>	006	026	<u>054</u>	046 C	036 0	<u>04</u>	<u>0042</u>			
Second Hi	ghest Delta "V	<u>/</u> .n								
23. L	24. C <sub>1</sub>				C <sub>5</sub>	C <sub>6</sub>	25. 			
064	002	008	013	<u>017</u> c	<u> </u>	<u>13</u>	<u> 199</u>			
(Coded impact (250) (998)	250 centimete	severity e impact.) earest centimet		(650) (999)   0	al Wheelbase Code to the n centimeter 650 centimete Unknown  1	ers or more ( 2.54 =				
(For hi	Damage Width ghest severity in Code to the new 250 centimeter Unknown	impact) earest centimet	2 5 0 er	(185)	Code to the n centimter 185 centimete Unknown inches	earest ers or more				

				FUEL SYSTEM
3	O. Are CDCs Documented	1	35.	Location of Fuel Tank-1 Filler Cap 2
	but Not Coded on The Automated File? (O) No (1) Yes			Location of Fuel Tank-2 Filler Cap  (0) No fuel tank (1) On back plane (2) Aft of center of the rear wheels (rear axle) on left side plane (3) Aft of center of the rear wheels (rear axle)
•	<ol> <li>Researcher's Assessment of Vehicle         Disposition         (0) Not towed due to vehicle damage         (1) Towed due to vehicle damage         (9) Unknown</li> </ol>			on right side plane  (4) Forward of center of the rear wheels (rear axle) on left side plane  (5) Forward of center of the rear wheels (rear axle) on right side plane  (6) Over the center of the rear wheels (rear axle) on left side plane
,	2. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? (0) No post manufacturer modifications (1) Yes - post manufacturer modifications (specify):	<u>0</u>	37	<ul> <li>(7) Over the center of the rear wheels (rear axle) on right side plane</li> <li>(8) Other (specify): <ul> <li>(9) Unknown</li> </ul> </li> <li>Type of Fuel Tank-1</li> </ul>
	(Include photograph of CERTIFICATION PLACARD in case report) (9) Unknown if vehicle is modified		38.	Type of Fuel Tank-2  (0) No fuel tank (electrical vehicle)  (1) Metallic  (2) Non-metallic  (9) Unknown
	FIRE OCCURRENCE			Location of Fuel Tank-1
	3. Fire Occurrence (0) No fire	0	40.	Location of Fuel Tank-2  (0) No fuel tank  (1) Aft of center of the rear wheels (rear axle) centered
	Yes, fire occurred (1) Minor (2) Major (9) Unknown			<ul> <li>(2) Aft of center of the rear wheels (rear axle) left side</li> <li>(3) Aft of center of the rear wheels (rear axle) right side</li> <li>(4) Forward of center of the rear wheels (rear axle) centered</li> </ul>
	34. Origin of Fire  (0) No fire  (1) Vehicle exterior (front, side, back, top)  (2) Exhaust system  (3) Fuel tank (and other fuel retention system parts)  (4) Engine compartment  (5) Cargo/trunk compartment	<u>O</u>	1	<ul> <li>(5) Forward of center of the rear wheels (rear axle) left side</li> <li>(6) Forward of center of the rear wheels (rear axle) right side</li> <li>(7) Over center of the rear wheels (rear axle)</li> <li>(8) Other (specify):  (9) Unknown</li> </ul> Damage to Fuel Tank-1
	(6) Instrument panel (7) Passenger compartment area (8) Other location (specify):  (9) Unknown		42.	Damage to Fuel Tank-2  (O) No fuel tank  (1) No damage to fuel tank  (2) Deformed, no seam failure  (3) Deformed, with a seam failure  (4) Punctured  (5) Lacerated (ripped)  (6) Abraded (scraped)  (7) Filler neck separation from the fuel tank  (8) Other damage (specify): FILLER NECK  (9) Unknown  PINCHES - WASKE
1			1	-

National Accident	Sampling	<b>System-Crashworthiness</b>	Data	System:	<b>Exterior</b>	Vehicle	Form
-------------------	----------	-------------------------------	------	---------	-----------------	---------	------

lational Accident Sampling System-Clashworthiness	
43. Leakage Location of Fuel System-1	47. Is This Vehicle Equipped With More Than Two Fuel Tanks?
44. Leakage Location of Fuel System-2	(0) No (one or two tanks only)
(O) No fuel tank	A To Tools
(1) No fuel leakage	Yes - More Than Two Tanks
•	(1) Yes no damage to any tank or filler
Primary Area Of Leakage	cap and <u>no fuel system leakage</u>
(2) Tank	(2) Yes no damage to any tank or filler
(3) Filler neck	cap but there is fuel system leakage
(4) Cap	(specify leakage location):
(5) Lines/pump/filter	
(6) Vent/emission recovery	(3) Yes damage to an additional tank or
(8) Other (specify):	filler cap and there is fuel system leakage
(9) Unknown	(specify the following):
(0)	Type of tank
	Tank location
45. Fuel Type-1	Filler cap location
	Tank damage
46. Fuel Type-2	Location of leakage
<u></u>	Type of fuel
Single Fuel Type	(9) Unknown if more than two tanks
(00) No fuel tank	
(01) Gasoline	
(O2) Diesel	
(03) CNG (Compressed Natural Gas)	COMMENTS
(04) LPG (Liquid Petroleum Gas) also	
known as Propane	
(05) LNG (Liquid Natural Gas)	
(06) Methanol (M100 or M85)	
(07) Ethanol (E100 or E85)	
(08) Other (Hydrogen or others) (specify):	
Electric Powered or Electric/Solar	
Powered Vehicles	
(10) Lead Acid Battery	
(11) Nickel-Iron Battery	
(12) Nickel-Cadmium Battery	
(13) Sodium Metal Chloride Battery	
(14) Sodium Sulfur Battery	
(18) Other (Specify):	
(98) Other Hybrid (specify):	
(99) Unknown fuel type	
*** STOP: IF THE CDS APPL	ICABLE VEHICLE WAS NOT TOWED ***
	(GV10 = 0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



### U.S. Department of Transportation

National Highway Traffic Safety

## INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

dministration	Chashwunthiness Data 515
1/9	GLAZING
1. Primary Sampling Unit Number 7 /	Type of Window/Windshield Glazing
2. Case Number - Stratum 120 A	15. WS <u>/</u> 16. LF <u>2</u> 17. RF <u>2</u> 18. LR <u>0</u> 19. RR <u>0</u>
3. Vehicle Number	20. BL $\frac{2}{2}$ 21. Roof $\frac{\mathcal{D}}{2}$ 22. Other $\frac{\mathcal{D}}{2}$
INTEGRITY	(O) No alexina
4. Passenger Compartment Integrity (00) No integrity loss  Yes, Integrity Was Lost Through (01) Windshield	<ul> <li>(0) No glazing</li> <li>(1) AS-1 — Laminated</li> <li>(2) AS-2 — Tempered</li> <li>(3) AS-3 — Tempered-tinted (original)</li> <li>(4) AS-2 — Tempered-with after market tint</li> <li>(5) AS-3 — Tempered-tinted (with additional after market tint</li> <li>(6) AS-14 — Glass/Plastic</li> </ul>
(O2) Door (side) (O3) Door/hatch (back door)	(7) Glazing removed prior to accident (8) Other (specify):
(O4) Roof	(b) Other (apectry).
(O5) Roof glass	(9) Unknown
(06) Side window (07) Rear window (backlight)	Window Precrash Glazing Status
(O8) Roof and roof glass	23. WS 1 24. LF 2 25. RF 2 26. LR 027. RR 0
(09) Windshield and door (side) (10) Windshield and roof	
(11) Side and rear window (side window and backlight) (12) Windshield and side window	28. BL <u>/</u> 29. Roof <u>O</u> 30. Other <u>O</u>
(12) Windshield and side Window  (13) Door and side window	(0) No glazing
(98) Other combination of above (specify):	(1) Fixed (2) Closed
(99) Unknown	(3) Partially opened
,,	(4) Fully opened
EXTRICATION	(7) Glazing removed prior to accident (9) Unknown
Door, Tailgate or Hatch Opening	Glazing Damage from Impact Forces
5. LF $\frac{3}{2}$ 6. RF $\frac{1}{2}$ 7. LR $\frac{0}{2}$ 8. RR $\frac{0}{2}$ 9. TG/H $\frac{2}{2}$	31. WS <u>2</u> 32. LF <u>6</u> 33. RF <u>1</u> 34. LR <u>0</u> 35. RR <u>0</u>
(0) No door/gate/hatch (1) Door/gate/hatch remained closed and operational	36. BL <u>6</u> 37. Roof <u>0</u> 38. Other <u>0</u>
(2) Door/gate/hatch came open during collision	(0) No glazing
(3) Door/gate/hatch jammed shut (8) Other (specify):	(1) No glazing damage from impact forces (2) Glazing in place and cracked from impact forces
(9) Unknown	(3) Glazing in place and holed from impact forces (4) Glazing out-of-place (cracked or not) and not holed from
	impact forces (5) Glazing out-of-place and holed from impact forces
	(6) Glazing disintegrated from impact forces
Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø	(7) Glazing removed prior to accident (9) Unknown if damaged
10. LF <u>D</u> 11. RF <u>D</u> 12. LR <u>O</u> 13. RR <u>D</u> 14. TG/H <u>2</u>	Glazing Damage from Occupant Contact
(0) No door/gate/hatch or door not opened	39. WS / 40. LF / 41. RF / 42. LR / 43. RR /
Door, Tailgate or Hatch Came Open During Collision (1) Door operational (no damage)	44. BL <u>/</u> 45. Roof <u>O</u> 46. Other <u>O</u>
(2) Latch/striker failure due to damage	(0) No glazing
(3) Hinge failure due to damage	(1) No occupant contact to glazing (2) Glazing contacted by occupant but no glazing damage
(4) Door structure failure due to damage	(3) Glazing in place and cracked by occupant contact
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage	(4) Glazing in place and holed by occupant contact
(6) Latch/striker and hinge failure due to damage	(5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
(8) Other failure (specify):	(6) Glazing out-of-place by occupant contact and holed by occupant contact
(9) Unknown	(7) Glazing removed prior to accident (8) Glazing disintegrated by occupant contact

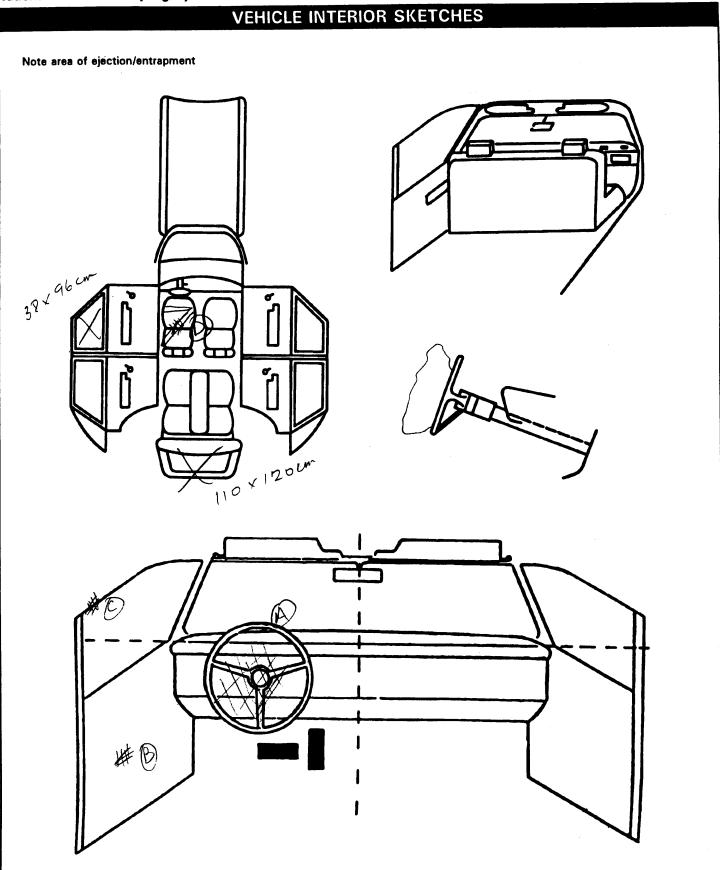
(9) Unknown if contacted by occupant

LOCATION OF INTRUSION	INTRUDED COMPONENT	(AI COMPARISON VALUE	Meas	urements Are In Ce INTRUDED VALUE	ntimeters) =	INTRUSION	DOMINANT CRUSH DIRECTION	
11	Door	135	_	105	=	30	LAT	] ,
11	SILL	135	_	121	=	14	1	9
11	DASH	134		128	=	6	١	
11	A-PILLAR	126	_	111	=	15	•	2
11	ROOF SINE RAIL	124	_	106	=	18	1	7
11	SEAT BACK	124	_	100	=	24	A	3
11	SEAT CUENION	124		103	=	21		5
21	SIDE PANEL - REAR OF B. PILLAR	126	_	118	=	8	ļ	10
21	E-PILLAR	126	_	99	=	27	( :	Z
21	SEAT CUSHION	128	_	109	=	19		6
21	SEAT BACK	128	_	106	=	22		]4
11	STEERING Count	112	_	106	=	6		
			_		=		·	
			_		=			
		-	_		=			]

#### OCCUPANT AREA INTRUSION Note: If no intrusions, leave variables IV47-IV86 blank. INTRUDING COMPONENT Interior Components Dominant (O1) Steering assembly Magnitude Crush Intruding Location of (O2) Instrument panel left Direction Component of Intrusion Intrusion (03) Instrument panel center (O4) Instrument panel right (O5) Toe pan (06) A (A1/A2)-pillar (07以 B-pillar (08) C-pillar 51. 2 1 52. 0 7 53. 3 54. 3 (09) D-pillar (10) Side panel - forward of the A1/A2-pillar (11) Door panel (side) (12) Side panel - rear of the B-pillar 1 56. 20 57. 3 58. 3 (13) Roof (or convertible top) (14) Roof side rail (15) Windshield (16) Windshield header 1 60. 2 1 61. 3 62. 3 (17) Window frame (18) Floor pan (includes(sill (19) Backlight header (20) Front seat back 64. <u>25</u> 65. <u>3</u> 66. <u>3</u> (21) Second seat back (22) Third seat back (23) Fourth seat back (24) Fifth seat back 68. <u>2</u> <u>5</u> 69. <u>3</u> 70. <u>3</u> (25) Seat cushion (26) Back door/panel (e.g., tailgate) (27) Other interior component (specify): **Exterior Components** (30) Hood (31) Outside surface of this vehicle (specify): (32) Other exterior object in the environment (specify): (33) Unknown exterior object (97) Catastrophic (98) Intrusion of unlisted component(s) (specify): (99) Unknown MAGNITUDE OF INTRUSION LOCATION OF INTRUSION (1) ≥ 3 centimeters but < 8 centimeters (2) $\geq$ 8 centimeters but < 15 centimeters Fourth Seat Front Seat (3) ≥ 15 centimeters but < 30 centimeters (41) Left (11) Left (42) Middle (4) ≥ 30 centimeters but < 46 centimeters (12) Middle (5) ≥ 46 centimeters but < 61 centimeters (43) Right (13) Right (6) $\geq$ 61 centimeters (97) Catastrophic Second Seat (7) Catastrophic (98) Other enclosed (21) Left (9) Unknown area (specify) (22) Middle (23) Right (99) Unknown DOMINANT CRUSH DIRECTION Third Seat (1) Vertical (31) Left (2) Longitudinal (32) Middle (3) Lateral (33) Right (7) Catastrophic (9) Unknown

	(All N	leasurements Are in Centimet	ers)		
COMPARISON VALUE	_	DAMAGE VALUE	=	DEFORMATION	
			=		***************************************
•			=		
			=		
			=		
					, r

STEERING COLUMN	INSTRUMENT PANEL
87. Steering Column Type (1) Fixed column (2) Tilt column (3) Telescoping column (4) Tilt and telescoping column (8) Other column type (specify): (9) Unknown	92. Odometer Reading
88. Tilt Steering Column Adjustment (0) No tilt steering column (1) Full up (2) Between full up and center (3) Center (4) Between center and full down (5) Full down (9) Unknown	Source: DASH DEFORMATION— UNAGUE  93. Instrument Panel Damage from Occupant Contact? (0) No (1) Yes (9) Unknown  94. Type of Knee Bolster Covering (0) No knee bolster (1) Padded
89. Telescoping Steering Column Adjustment (0) No telescoping steering column (1) Full back (2) Between full back and midpoint (3) Midpoint (4) Between midpoint and full forward (5) Full forward (9) Unknown	(2) Rigid plastic (8) Other (specify): (9) Unknown  95. Knee Bolsters Deformed from Occupant Contact? (0) No knee bolster (1) No deformation (2) Yes - deformation (9) Unknown
90. Steering Rim/Spoke Deformation  Code actual measured deformation to the nearest centimeter (00) No steering rim deformation (01-14) Actual measured value in centimeters (15) 15 centimeters or more (98) Observed deformation cannot be measured (99) Unknown	96. Did Glove Compartment Door Open During Collision(s)? (0) No glove compartment door (1) No - door did not open (2) Yes - door opened (9) Unknown  97. Adaptive (Assistive) Driving Equipment
91. Location of Steering Rim/Spoke Deformation (00) No steering rim deformation  Quarter Sections (01) Section A (02) Section B (03) Section C (04) Section D  Half Sections (05) Upper half of rim/spoke (06) Lower half of rim/spoke (07) Left half of rim/spoke (08) Right half of rim/spoke (09) Complete steering wheel collapse (10) Undetermined location (99) Unknown	(0) No adaptive driving equipment (1) Adaptive driving equipment installed (Check all that apply.) [] Hand controls for braking/acceleration [] Steering control devices (attached to OEM steering wheel [] Steering knob attached to steering wheel [] Low effort power steering (unit or device) [] Replacement steering wheel (i.e., reduced diameter) [] Joy-stick steering controls [] Wheelchair tie-downs [] Modification to seat belts (specify): [] Additional or relocated switches (specify): [] Raised roof [] Wall-mounted head rest (used behind wheelchair) [] Other adaptive device (specify):  (9) Unknown



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

compartment, damage to instrument panel structure.

		POIN	TS OF OCC	CUPANT CONTACT		
Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical	Evidence	Confidence Level of Contact Point
Α	170	01	unle	BAG DEPLOYED		1
В	052	01	mk	SCUFF		1
С	058	01	HEAD	HAIR		,
D	152	01	unh	WEOBING SCUFF-B	321 T C. T	<del>-                                    </del>
Ε			V	WEST SUPPLY	BY EXTRICIATION	
F					DY REXTRICATION	
G						
Н				<del>V 7.15.</del>		
J		<u> </u>				
K			<del> </del>			
<u>``</u>			<del></del>			·
M			<del></del>			
N	<u> </u>					
N						
of codes (OO7) Steering column,tr selector is estachmen (OO8) Cellular te radio (OO9) Add on ec deck, air of (O10) Left instru- below (O11) Center ins below (O12) Right instru- below (O13) Glove con (O14) Knee bols (O15) Windshiel more of th header, A instrumen (passenge (O17) Windshiel exterior ol	wheel (combination 004 and 005) ansmission aver, other mt slephone or CB quipment(e.g., tape conditioner) ament panel and strument panel and rument panel and rument panel and rument panel and following: front (A1/A2)-pillar, t panel, mirror, or assembly (driver d including one or ne following: front (A1/A2)-pillar, t panel, or mirror t panel, or mirror r side only)	(056) Left sid (057) Left sid (058) Left sid (059) Cher k (specify Right SIDE (101) Right sight A (102) Right sight A (104) Right B (105) Other k (107) Right sid (107) Right sid (107) Right sid (109) Right sid (1	e hardware or  (A1/A2)-piller  piller  pit piller (specify):  e window glass e window sill e window glass g one or more of the ng: frame, window  A1/A2)-piller, B-piller, side rail.  of the side object  (A1/A2)-piller  piller ght piller (specify):  de window glass g one or more of the ng: frame, window  A1/A2)-piller, B-piller, side rail. ght side object	webbing/buckle  (153) Belt restraint B-pillar or door frame attachment point  (154) Other restraint system component (specify):  (155) Head restraint system (160) Other occupants (specify):  (161) Interior loose objects (162) Child safety seat (specify):  (163) Other interior object (specify):  AIR_BAG (170) Air bag-driver side (175) Air bag compartment cover-driver side (185) Air bag-passenger side (185) Air bag-compartment cover-passenger side (185) Air bag compartment cover-passenger side (190) Other air bag (specify)  (195) Other air bag compartment cover (specify)  ROOF (201) Front header (202) Rear header (203) Roof left side rail (204) Roof right side rail (205) Roof or convertible top  FLOOR (251) Floor (including toe pan) (252) Floor or console mounted transmission lever, including	ADAPTIVE (ASSISTIVEQUIPMENT (401) Hand controls for braking/acceler (402) Steering control (attached to OE wheel) (403) Steering knob a steering wheel (405) Replacement st (i.e., reduced di (406) Joy stick steering (407) Wheelchair tie-(408) Modification to (apacify): (409) Additional or reswitches, (apacify): (410) Raised roof (411) Wall mounted hi (used behind wi (412) Other adaptive (apacify):	or strong or str
				console (253) Parking brake handle (254) Foot controls including parking brake	CONFIDENCE LEVEL O POINT (1) Certain (2) Probable (3) Possible (9) Unknown	F CONTACT

### MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form. If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

	If the vehicle has automatic rest	Left	Center	Right
F I R S T	Availability	4.	0	4
	Evidence of usage	04	00	04
	Used in this crash?	V£5	0	
	Proper Use	1	0	1
	Failure Modes	1	ь	
·	Anchorage Adjustment		0	1,
	Availability	4	0	4,
<b>WECOZO</b>	Evidence of usage	04	00	04
	Used in this crash?		0	_
	Proper Use		0	
	Failure Modes		6	1
	Anchorage Adjustment		Ö	
OTHER	Availability			
	Evidence of usage			
	Used in this crash?	•		
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			

#### Manual (Active) Beit System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available type unknown

#### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):
- (9) Unknown

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used type unknown
- (08) Other belt used (specify):
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with
- child safety seat
- (15) Belt used with child safety seat type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

#### Proper Use of Manual (Active) Beits

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety

#### Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):
- (9) Unknown

## Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated
- (specify): \_\_\_
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

#### Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage, adjustment for shoulder belt

#### Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

#### National Accident Sampling System-Crashworthiness Data System: Interior Vehicle Form **AUTOMATIC RESTRAINTS** NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form. **AIR BAGS Left Front** Right Front Other Availability/Function R Deployment S Failure Air Bag System Availability/Function Frontal Air Bag System Deployment Air Bag(s) Deployment, Other Than First (O) Not equipped/not available (This Occupant Position) Seat Frontal (This Occupant Position) (1) Air bag (0) Not equipped/not available (0) Not equipped with an <u>"other"</u> air bag (1) Deployed during accident (as a result (1) Deployed during accident (as a result Non-functional of impact) of impact) (2) Air bag disconnected (specify): (2) Deployed inadvertently just prior to (2) Deployed inadvertently just prior accident to accident (3) Air bag not reinstalled (3) Deployed, accident sequence (3) Deployed, details unknown (9) Unknown undetermined (4) Deployed as a result of a (4) Deployed as a result of a noncollision noncollision event during accident Are There Indications of Air Bag event during accident sequence sequence (e.g., fire, explosion, System Failure? (This Occupant Position) (e.g., fire, explosion, electrical) electrical) (0) Not equipped/not available (5) Unknown if deployed (5) Unknown if deployed (1) No (7) Nondeployed (7) Nondeployed (2) Yes (specify): (9) Unknown (9) Unknown

#### **AUTOMATIC BELTS**

	1		
		Left	Right
	Availability/Function		
F I R S T	Use		
	Туре		
	Proper Use		
	Failure Modes		

#### Automatic (Passive) Belt System **Availability/Function**

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts type unknown

#### Non-functional

(9) Unknown

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

#### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
- Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative)
- (3) Automatic belt use unknown
- (9) Unknown

### Automatic (Passive) Belt System Type

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system (9) Unknown

#### Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- Automatic belt worn around more (5) than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperty with child safety seat (specify):
- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

#### Automatic (Passive) Belt Failure Modes **During Accident**

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- Broken buckle or latchplate
- Upper anchorage separated
- Other anchorage separated (specify):
- (6) Broken retractor
- Combination of above (specify):
- (8) Other automatic belt failure (specify):
- (9) Unknown

## FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data for the driver and first seat passenger in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant

Assessment Form.

	Driver	Passenger
Type of air bag?		
Flaps open at tear points?	2	
Flaps damaged?		
Air bag damaged?	05	
Source of air bag damage	- 82	
Air bag tethered?		
Air bag have vent ports?		
Other occupant contact air bag?	1	
Occupant wearing eyewear?		

### Type of Air Bag

- (O) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (O) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- 8) Unknown if deployed
- (9) Unknown

#### Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

#### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):
- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

#### Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify): SHARP METEL- VEHICLE
- (95) Damaged, unknown source EXTER
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

#### Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- 2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

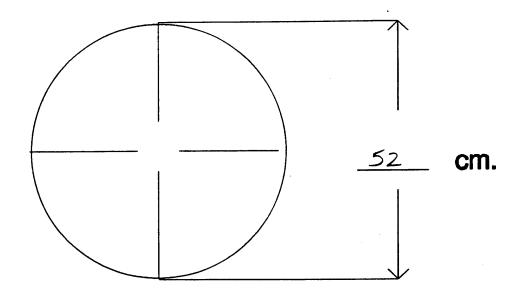
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

#### Was This Occupant Wearing Eye-wear?

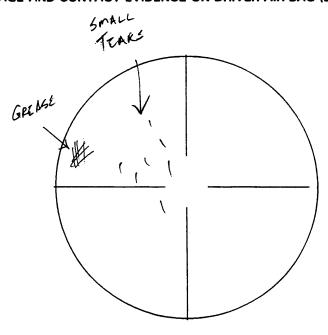
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

## 1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



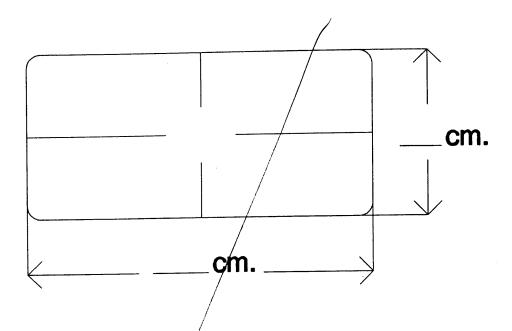
### 2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)



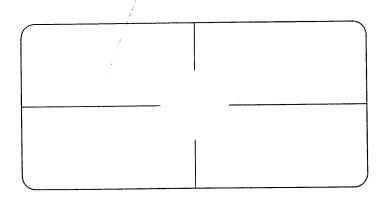
Dhiven Ain BAG 3	KETCHES (Cont'd)
3. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE) a. Upper Flap  width (Wu) 21 width (WL) 21  height (Hu) 7 height (HL) 7	
4. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE	5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS
6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS	

# PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)



	CALLONES (Compted)
PASSENGER AIR BAC	S SKETCHES (Cont'd)
3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE) a. Flap	4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)
width (W)	a. Upper Flap b. Lower Flap
height (H)	width (W <sub>U</sub> ) width (W <sub>L</sub> )
neight (h)	height (H <sub>U</sub> ) height (H <sub>L</sub> )
	T H, W,
	<b>,</b>
5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE	6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS
7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS	
10 11 12 1 2	
9 3	
8 7 6 5 4	

Nat	tional Accident Sampling System-Crashworthiness Data System: Interior Vehicle Form		Page 9
	"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES		
1.	SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)		
2.	SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)	s	
ī			

	"OTHER" AIR BAG SKETCHES (Cont'd)
3. SKETCH AIR BAG MODULE FLAP	AND SIZE OR OPENING FOR AIRBAG
4. SKETCH AIR BAG VENT PORTS	

# HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
	Head Restraint Type/Damage	1	0	1
F	Seat Type	02	00_	02
i	Seat Performance	6	D	3
R	Seat Orientation	1	O	1
T	Seat Track Position	5	0	5
	Seat Back Incline Pre/Post Impact	23	0	22
	Head Restraint Type/Damage	0	0	0
S	Seat Type	03	03	03
E C	Seat Performance	5	6	
0	Seat Orientation			<u> </u>
N D	Seat Track Position		1	1
	Seat Back Incline Pre/Post Impact	01	01	01
	Head Restraint Type/Damage	•		
Т	Seat Type			
H	Seat Performance			
R	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
	Head Restraint Type/Damage			
O T	Seat Type			
H	Seat Performance			
E R	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

## HEAD RESTRAINTS/SEAT EVALUATION

#### Head Restraint Type/Damage by Occupant at This Occupant Position Position)

- (O) No head restraints
- (1) Integral no damage(2) Integral damaged during accident
- Adjustable no damage Adjustable damaged during accident
- Add-on no damage
- (6) Add-on damaged during accident
- (8) Other Specify):
- (9) Unknown

# Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03)Bench
- (04)Bench with separate back cushions
- (05)Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify):
- (10) Box mounted seat (i.e., van type) (99) Unknown

# Seat Performance (this Occupant

- (0) Occupant not seated or no seat
- No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify):
  SEAT BACK IN RECLINES POSI
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant (6) Deformed by passenger compartment intrusion
- LT. REAR[14] (specify): LT, PooR ( (7) Combination of above (specify):
- (8) Other (specify):
- (9) Unknown

## Seat Back Incline Prior and Post **Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable

#### Upright prior to impact

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- Moved to slightly rearward position
- Retained pre-impact position
- Moved to slightly forward position
- (16)Moved to forward midrange position
- (17)Moved to completely forward position

#### Moved to completely rearward Seat Orientation (this Occupant

- Position) (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):
- (9) Unknown

## Slightly reclined prior to impact

- position
- Moved to rearward midrange (22)position
- Retained pre-impact postion (23)(24)Moved to upright position
- (25)Moved to slightly forward position
- (26)Moved to forward midrange position
- Moved to completely forward (27)position

#### Seat Track Adjusted Position Prior To Impact

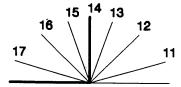
- (0) Occupant not seated or no seat

# (1) Non-adjustable seat track

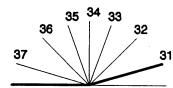
- Adjustable Seat Track (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

### Completely reclined prior to impact

- Retained pre-impact position (31)
- Moved to rearward midrange (32)position
- (33)Moved to slightly rearward position
- (34)Moved to upright position
- (35)Moved to slightly forward position
- (36)Moved to forward midrange position
- Moved to completely forward position
- (99) Unknown







Coding diagrams for Seat Back Incline Position Prior and Post Impact

ber in the first row and complete the column below lete a column for each child safety seat present.
Below for Each Child Safety Seat
Child Safety Seat Shield Usage
Child Safety Seat Tether Usage Note: Options Below Are Used for Variables 3-5.  (OO) No child safety seat  Not Designed with Harness/Shield/Tether (O1) After market harness/shield/tether added, not used (O2) After market harness/shield/tether used (O3) Child safety seat used, but no after market harness/shield/tether added (O9) Unknown if harness/shield/tether added or used  Designed With Harness/Shield/Tether (11) Harness/shield/tether not used (12) Harness/shield/tether used (19) Unknown if harness/shield/tether used (21) Harness/shield/tether not used (22) Harness/shield/tether used (29) Unknown if harness/shield/tether used (99) Unknown if child safety seat used  Child Safety Seat Make/Model (Specify make/model and occupant number)

(99) Unknown if child safety seat used3. Child Safety Seat Harness Usage

	E	JECTION/E	ENTRAPN	IENT DAT	ΓΑ		
Com	Complete the following if the researcher has any indication that an occupant was either ejected from or entrappe in the vehicle. Code the appropriate data on the Occupant Assessment Form.						
EJE(	CTION No [ ] Yes [ ] cribe indications of ejection and l	body parts in	volved in pa	rtial ejection	(s):		
	Occupant Number						
	Ejection						
	(Note on Vehicle Interior Sketch) Ejection Area						
	Ejection Medium	/					
	Medium Status						
Ejection (1) Complete ejection (2) Partial ejection (3) Ejection, Unknown degree (9) Unknown		(7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): (9) Unknown		(5) Integral structure (8) Other medium (specify):  (9) Unknown			
Ejection Area (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear		Ejection Medium (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify):		to impa (1) O (2) C (3) In	ict) pen	nmediately Prior	
ļ.	RAPMENT No [ ] Yes	-					
Com	ponent(s):						***************************************
(Not	e in vehicle interior diagram)						



### U.S. Department of Transportation

## **OCCUPANT ASSESSMENT FORM**

Form Approved O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

National Highway Traffic Safety Administration

1/G	OCCUPANT'S SEATING
1. Primary Sampling Unit Number 4 1	10.0
2. Case Number - Stratum / 2 o A	10. Occupant's Seat Position//
3 Vehicle Number	(11) Left side
3. Vehicle Number	(12) Middle
4. Occupant Number	(13) Right side
OCCUPANT'S CHARACTERISTICS	(14) Other (specify):  (15) On or in the lap of another occupant
OCCUPANT 5 CHARACTERISTICS	(15) On or in the lap of another occupant
5. Occupant's Age 3	Second Seat (21) Left side
Code actual age at time of accident. (00) Less than one year old (specify by month):	(22) Middle
(00) 2000 than one your old topouny by monthly.	(23) Right side
(97) 97 years and older	+24) Other (specify):
(99) Unknown	(25) On or in the lap of another occupant
	Third Seat
<del>-</del> 7	(31) Left side
6. Occupant's Sex	(32) Middle
(1) Male	(33) Right side
(2) Female-not reported pregnant	(34) Other (specify):
(3) Female-pregnant-1st trimester(1st-3rd month)	(35) On or in the lap of another occupant
<ul><li>(4) Female-pregnant-2nd trimester(4th-6th month)</li><li>(5) Female-pregnant-3rd trimester(7th-9th month)</li></ul>	Fourth Seat
(6) Female-pregnant-term unknown	(41) Left side
(9) Unknown	(42) Middle
114	(43) Right side
168	(44) Other (specify):
7. Occupant's Height	(45) On or in the lap of another occupant
Code actual height to the nearest	(97) In or on unenclosed area
centimeter.	(98) Other seat (specify):
(999) Unknown 167.64	(99) Unknown
$\frac{1666}{\text{inches}} \times 2.54 = \frac{162.5}{\text{centimeters}} = 7$	
inches $\times 2.54 = 1625$ centimeters $07.7$	
8. Occupant's Weight	11. Occupant's Posture
Code actual weight to the nearest	(0) Normal posture
kilogram.	Abnormal posture
(999)Unknown 77.112	(1) Kneeling or standing on seat
bounds X .4536 = kilograms	(2) Lying on or across seat (3) Kneeling, standing or sitting in front of seat
Kilograms	(4) Sitting sideways or turned to talk with another
9. Occupant's Role	occupant or to look out a rear window
(1) Driver	(5) Sitting on a console (6) Lying back in a reclined seat position
(2) Passenger	(7) Bracing with feet or hands on a surface in front
(9) Unknown	of seat
	(8) Other abnormal posture (specify):
	(9) Unknown
·	
_	

EJECTION/ENTRAPMENT						
	(2) Partia	plete ejection al ejection ion, unknown degree	<u>O</u> .	15. Medium Status (Immediately Prior To Impact) (O) No ejection (1) Open (2) Closed (3) Integral structure (9) Unknown		
14.		jection dshield front t front rear t rear er area (e.g., back of pickup, cify): Medium	<u>O</u> etc.)	16. Entrapment (0) Not entrapped/exit not inhibited (1) Entrapped/pinned - mechanically restrained (2) Could not exit vehicle due to jammed doors, fire, etc. (specify): (9) Unknown  17. Occupant Mobility (0) Occupant fatal before removed from vehicle (1) Removed from vehicle while unconscious or disoriented (2) Removed from vehicle due to injuries (3) Exited vehicle with some assistance		
	(1) Door (2) Nonf (3) Fixed (4) Nonf (5) Integ	/hatch/tailgate fixed roof structure d glazing fixed glazing (specify): gral structure er medium (specify):		(4) Exited vehicle under own power (5) Occupant fully ejected (9) Unknown		

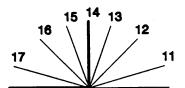
BELT SYSTEM	I FUNCTION
18. Manual (Active) Belt System Availability (0) None available (1) Belt removed/destroyed (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt available—type unknown  Integral Belt Partially Destroyed (6) Shoulder belt (lap belt destroyed/removed) (7) Lap belt (shoulder belt destroyed/removed)	22. Shoulder Belt Upper Anchorage Adjustment (0) No shoulder belt (1) No upper anchorage adjustment for shoulder belt  Adjustable shoulder Belt Upper Anchorage (2) In full up position (3) In mid position (4) In full down position (5) Position unknown (9) Unknown if position has adjustable upper anchorage adjustment
(8) Other belt (specify):  (9) Unknown  19. Manual (Active) Belt System Use (00) None used, not available, or belt removed/destroyed (01) Inoperative (specify):  (02) Shoulder belt (03) Lap belt (04) Lap and shoulder belt (05) Belt used—type unknown (08) Other belt used (specify):	23. Automatic (Passive) Belt System Availability/ Function (0) Not equipped/not available (1) 2 point automatic belts -{2} 3 point automatic belts (3) Automatic belts - type unknown  Non-functional (4) Automatic belts destroyed or rendered inoperative (9) Unknown  24. Automatic (Passive) Belt System Use (0) Not equipped/not available/destroyed or
(12) Shoulder belt used with child safety seat (13) Lap belt used with child safety seat (14) Lap and shoulder belt used with child safety seat (15) Belt used with child safety seat—type unknown (18) Other belt used with child safety seat (specify): (99) Unknown if belt used  20. Proper Use of Manual (Active) Belts (0) None used or not available (1) Belt used properly with child safety seat	rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): (3) Automatic belt use unknown (9) Unknown  25. Automatic (Passive) Belt System Type (0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown  26. Proper Use of Automatic (Passive) Belt System (0) Not equipped/not available/not used
Belt Used Improperly (3) Shoulder belt worn under arm (4) Shoulder belt worn behind back or seat (5) Belt worn around more than one person (6) Lap belt worn on abdomen (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):  (8) Other improper use of manual belt system (specify):  (9) Unknown	(1) Automatic belt used properly (2) Automatic belt used properly with child safety seat  Automatic Belt Used Improperly (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):
21. Manual (Active) Belt Failure Modes During Accident (0) No manual belt used or not available (1) No manual belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): (6) Broken retractor (7) Combination of above (specify): (8) Other manual belt failure (specify):	(8) Other improper use of automatic belt system (specify): (9) Unknown  27. Automatic (Passive) Belt Failure Modes During Accident (0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): (6) Broken retractor (7) Combination of above (specify): (8) Other automatic belt failure (specify):

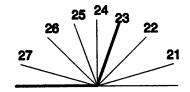
POLICE REPORTED RESTRAINT USE	AIR BAG SYSTEM FUNCTION
28. Police Reported Belt Use  (0) None used (1) Police did not indicate belt use (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt used, type not specified (6) Child safety seat (7) Automatic belt (8) Other type belt, (specify):	30. Frontal Air Bag System Availability/Function (This Occupant Position) (0) Not equipped/not available (1) Air bag  Non-functional (2) Air bag disconnected (specify):  (3) Air bag not reinstalled (9) Unknown
(9) Police indicated "unknown"  29. Police Reported Air Bag Availability/Function (0) No air bag available (1) Police did not indicate air bag availability/function (2) Deployed (3) Not deployed (4) Unknown if deployed (9) Police indicated "unknown"	31. Frontal Air Bag System Deployment  (This Occupant Position) (O) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown
Check the Primary Source Used In Determining Belt Use.  [ ] Not equipped/not available/destroyed or rendered inoperative [ ] Vehicle inspection [ ] Official injury data [ ] Driver/occupant interview [ ] Other (specify): [ ] Unknown if belt used	32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) (0) Not equipped/not available (1) Air bag  Non-functional (2) Air bag disconnected (specify):  (3) Air bag not reinstalled (9) Unknown Specify type of "other" air bag present:
	33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) (0) Not equipped with an "other" air bag (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown
	34. Are There Indications of Air Bag System Failure? (This Occupant Position) (0) Not equipped/not available (1) No (2) Yes (specify):  (9) Unknown

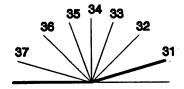
FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION						
35. Had Vehicle Been in Previous Accident(s)?  (0) Not equipped/not available  (1) No previous accidents	40. Longitudinal Component of  Delta V For Air Bag  Deployment Impact					
Yes (2) Previous accident(s) without deployment(s) (3) One previous accident with deployment (4) More than one previous accident with at least one deployment (8) Previous accidents, unknown deployment status (9) Unknown	(_000) Not equipped/not available  Code the value of the delta V for the impact that initiated the air bag deployment  (_996) Deployment, unknown longitudinal Delta V  (_997) Not deployed  (_998) Unknown if deployed  (_999) Unknown					
36. Type of Air Bag (0) Not equipped/not available (1) Original manufacturer installed system (2) Retrofitted air bag (3) Replacement air bag (8) Unknown type of air bag (9) Unknown	41. Did Air Bag Module Cover Flap(s) Open At  Designated Tear Points?  (0) Not equipped/not available  (1) No  (2) Yes  (3) Deployed, unknown if flap(s) opened at designated tear points  (7) Not deployed  (8) Unknown if deployed					
37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? (0) Not equipped/not available (1) No prior maintenance (2) Yes, prior maintenance (specify):	(9) Unknown  42. Were Air Bag Module Cover Flap(s) Damaged?  (0) Not equipped/not available  (1) No  (2) Yes (specify):  (3) Deployed, unknown if air bag module cover					
38. Air Bag Deployment Accident Event  Sequence Number  (00) Not equipped/not available  Code the accident event sequence number that initiated the air bag	flap(s) damaged (7) Not deployed (8) Unknown if deployed (9) Unknown  43. Was There Damage To The Air Bag?					
deployment (96) Deployed, unknown event (97) Not deployed (98) Unknown if deployed (99) Unknown	(00) Not equipped/not available (01) Not damaged  Yes - Air Bag Damage (02) Ruptured (03) Cut (04) Torn					
39. CDC For Air Bag Deployment Impact (0) Not equipped/not available (1) Highest delta V (2) Second highest delta V (3) Other non-coded delta V (specify):  (6) Deployed, unknown event (7) Not deployed (8) Unknown if deployed (9) Unknown	(05) Holed (06) Burned (07) Abraded (88) Other damage (specify):  (95) Damaged, details unknown (96) Deployed, unknown if damaged (97) Not deployed (98) Unknown if deployed (99) Unknown					

FIRST SEAT FRONTAL AIR BAG SYSTEM	HEAD RESTRAINT AND SEAT EVALUATION
44. Source of Air Bag Damage (00) Not equipped/not available (01) Not damaged (02) Object worn by occupant, (specify):  (03) Object carried by occupant, (specify):  (04) Adaptive/assistive controls, (specify):  (05) Fire in vehicle (06) Thermal burns	49. Head Restraint Type/Damage by Occupant at This Occupant Position (0) No head restraints (1) Integral—no damage (2) Integral—damaged during accident (3) Adjustable—no damage (4) Adjustable—damaged during accident (5) Add-on—no damage (6) Add-on—damaged during accident (8) Other (specify):
(95) Rescue or emergency efforts (88) Other damage source (specify):  SHARP METAL - VEHICLE EXTERIOR (95) Damaged, unknown source (96) Deployed, unknown if damaged (97) Not deployed (98) Unknown if deployed (99) Unknown	50. Seat Type (this Occupant Position) (00) Occupant not seated or no seat (01) Bucket (02) Bucket with folding back (03) Bench (04) Bench with separate back cushions (05) Bench with folding back(s) (06) Split bench with separate back cushions (07) Split bench with folding back(s)
45. Was The Air Bag Tethered? (0) Not equipped/not available (1) No (2) Yes (specify number of tether straps):  (3) Deployed, unknown if tethered (7) Not deployed	(08) Pedestal (i.e., column supported) (09) Box mounted seat (i.e., van type) (10) Other seat type (specify):  (99) Unknown
(8) Unknown if deployed (9) Unknown  46. Did The Air Bag Have Vent Ports? (0) Not equipped/not available (1) No (2) Yes (specify number of vent ports):  (3) Deployed, unknown if vent ports present	51. Seat Orientation (this Occupant Position) (0) Occupant not seated or no seat (1) Forward facing seat (2) Rear facing seat (3) Side facing seat (inward) (4) Side facing seat (outward) (8) Other (specify):
(7) Not deployed (8) Unknown if deployed (9) Unknown	52. Seat Track Adjusted Position Prior To Impact (0) Occupant not seated or no seat (1) Non-adjustable seat track
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? (0) Not equipped/not available (1) No (2) Yes (specify):  (3) Deployed, unknown if other occupant contact to air bag (7) Not deployed (8) Unknown if deployed (9) Unknown	Adjustable Seat Track (2) Seat at forward most track position (3) Seat between forward most and middle track positions (4) Seat at middle track position (5) Seat between middle and rear most track positions (6) Seat at rear most track position (9) Unknown
48. Was This Occupant Wearing Eye-wear? (0) Not equipped/not available (1) No (2) Eyeglasses/sunglasses (3) Contact lenses (4) Deployed, unknown if eyewear worn (7) Not deployed (8) Unknown if deployed (9) Unknown	

	HEAD RESTRAINT AND SEA	AT EVALUATION continued
53.	Seat Back Incline Prior and Post Impact (00) Occupant not seated or no seat (01) Not adjustable	
	Upright prior to impact  (11) Moved to completely rearward position (12) Moved to rearward midrange position (13) Moved to slightly rearward position (14) Retained pre-impact position (15) Moved to slightly forward position (16) Moved to forward midrange position (17) Moved to completely forward position	15 14
	Slightly reclined prior to impact (21) Moved to completely rearward position (22) Moved to rearward midrange position (23) Retained pre-impact position (24) Moved to upright position (25) Moved to slightly forward position (26) Moved to forward midrange position (27) Moved to completely forward position	25 26 27
	Completely reclined prior to impact (31) Retained pre-impact position (32) Moved to rearward midrange position (33) Moved to slightly rearward position (34) Moved to upright position (35) Moved to slightly forward position (36) Moved to forward midrange position (37) Moved to completely forward position	35 34 36 37
54	(99) Unknown  Seat Performance (this Occupant Position) (0) Occupant not seated or no seat (1) No seat performance failure(s) (2) Seat adjusters failed (3) Seat back folding locks or "seat back" failed (specify): (4) Seat track/anchors failed (5) Deformed by impact of occupant (6) Deformed by passenger compartment intrusion, (specify): Lipidor Pawall  (7) Combination of above (specify): (8) Other (specify): (9) Unknown	
	(a) Comment	







Nauc	onal Accident Sampling System-Crashworthines		ETY SEAT	raye
	O O			
55.	Child Safety Seat Make/Model (000) No child safety seat		58. Child Safety Seat Harness Usage	0
	Applicable codes are found in your NASS CDS		FO. Okild Oction Com Shield House	0
	Data Collection, Coding and Editing (950) Built-in child safety seat	5	59. Child Safety Seat Shield Usage	<u> </u>
	(997) Other make/model (specify):			
		6	60. Child Safety Seat Tether Usage	<u> </u>
	(998) Unknown make/model		N. A. O. M. A. Halana and Backla As	
	(999) Unknown if child safety seat used		Note: Options below applicable to Variables OA58-OA60.	
İ			(00) No child safety seat	
56.	Type of Child Safety Seat	0		
	(O) No child safety seat	l l	Not Designed With Harness/Shield/Tether	
	(1) Infant seat (2) Toddler seat		(01) After market harness/shield/tether added, not used	
	(3) Convertible seat		(O2) After market harness/shield/tether used	
	(4) Booster seat - with shield	Ì	(03) Child safety seat used, but no after ma	rket
	(5) Booster seat - without shield		harness/shield/tether added	•
	(7) Other type child safety seat (specify):		(09) Unknown if harness/shield/tether added or used	
	(8) Unknown child safety seat type		added of dised	
	(9) Unknown if child safety seat used		Designed With Harness/Shield/Tether	
			(11) Harness/shield/tether not used	
57	Child Safety Seat Orientation	0	(12) Harness/shield/tether used (19) Unknown if harness/shield/tether used	
37.	(00) No child safety seat		(13) Olikilowii ii ilailless/sillelu/tetriei useu	
	·		Unknown If Designed With Harness/Shield/To	ether
1	Designed for Rear Facing for This Age/Weight	·	(21) Harness/shield/tether not used	
1	(01) Rear facing (02) Forward facing		(22) Harness/shield/tether used (29) Unknown if harness/shield/tether used	
1	(08) Other orientation (specify):		(23) Officiowit it Harriess/shield/tetrier dsed	
	· · ·		(99) Unknown if child safety seat used	
	(09) Unknown orientation			
1	Designed For Forward Facing for This Age/We	eight		
1	(11) Rear facing	;		
	(12) Forward facing (18) Other orientation (specify):			2
1	(10) Other orientation (specify).			
	(19) Unknown orientation			
l	Unknown Design or Orientation For This			
1	Age/Weight, or Unknown Age/Weight			
	(21) Rear facing			<u>.</u> .
	(22) Forward facing			
1	(28) Other orientation (specify):			
İ	(29) Unknown orientation			
	(99) Unknown if child safety seat used			•
		1		
				•
		1		
		-		

.

INJURY CONSEQUENCES  61. Injury Severity (Police Rating)  (0) O - No injury (1) C - Possible injury (2) B - Nonincapacitating injury (3) A - Incapacitating injury (4) K - Killed (5) U - Injury, severity unknown (6) Died prior to accident (9) Unknown  62. Treatment - Mortality (0) No treatment (1) Fatal (2) Fatal - ruled disease (specify):  Nonfatal (3) Hospitalization (4) Transported and released (5) Treatment at scene - nontransported (6) Treatment later (7) Treatment - other (specify):	63. Type Of Medical Facility (for Initial Treatment)  (0) Not treated at a medical facility (1) Trauma center (2) Hospital (3) Medical clinic (4) Physician's office (5) Treatment later at medical facility (8) Other (specify):  (9) Unknown  64. Hospital Stay  (00) Not Hospitalized  Code the number of days (up through 60) that the occupant stayed in hospital. (61) 61 days or more (99) Unknown  65. Working Days Lost  Code the number of days (up through 60) that the occupant lost from work due to the accident (00) No working days lost
(6) Treatment later	(up through 60) that the occupant lost from work due to the accident
STOP WO	ORK HERE

**VARIABLES 66-74** 

TO BE CODED BY THE ZONE CENTER

# TO BE CODED BY THE ZONE CENTER

INJURY CONSEQUENCES	TRAUMA DATA
Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, n days = 30 + n up through 30 days = 60)  (00) Not fatal  (96) Fatal - ruled disease  (99) Unknown	71. Glasgow Coma Scale (GCS) Score (at Medical Facility) (00) Not injured (01) Injured - not treated at medical facility (02) No GCS Score at medical facility (03-15) Code the actual value of the initial GCS Score recorded at medical facility. (97) Injured, details unknown (99) Unknown if injured
67. 1st Medically Reported Cause of Death  68. 2nd Medically Reported Cause of Death  69. 3rd Medically Reported Cause of Death  Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  (00) Not fatal or no additional causes  (96) Mode of death given but specific injuries are not linked to cause of death. (specify):  (97) Other result (includes fatal ruled	72. Was the Occupant Given Blood?  (1) No - blood not given (2) Yes - blood given (specify units): (9) Unknown if blood given  73. Arterial Blood Gases (ABG) - HCO <sub>3</sub> (00) Not injured (01) Injured, ABGs not measured or reported (02-50) Code the actual value of the HCO <sub>3</sub> (96) ABGs reported, HCO <sub>3</sub> unknown (97) Injured, details unknown (99) Unknown if injured
disease) (specify):	BELT USE DETERMINATION
70. Number of Recorded Injuries for This OccupantCode the actual number of injuries recorded for this occupant. (00) No recorded injuries (97) Injured, details unknown (99) Unknown if injured	74. Primary Source of Belt Use Determination (0) Not equipped/not available/destroyed or rendered inoperative (1) Vehicle inspection (2) Official injury data (3) Driver/occupant interview (8) Other (specify): (9) Unknown if belt used

Administration

Form Approved O.M.B. No. 2127-0021

# NATIONAL ACCIDENT SAMPLING SYSTEM

### OCCUPANT INJURY FORM

CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

### INJURY DATA-

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	Body Region	Type of Anatomic Structure		Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
1st	5. 🗸	6. 4	7.2	8. <i>02</i>	9. <u>18</u>	10.6	11. 4 12.	051	13. 2	4	15.01
2nd	18	17.4	18. 4	19. 14	20. <u>/ /</u>	21. 4	22. 3 23.	<u>05 1</u>	24 2	25	26. <u>O</u> _
3rd	27	28. 4	29.5	30. <u>0</u> 2	31. <u>5</u> 2	32. 4	33. 2 34.	051	35.2	36. <u> </u>	37. <u>Q</u>
= 4th	38	39. 🔟 '	40. 9	41.04	42. <u>0</u> 2	43	44. 245.	203	46.2	17	48.08
5th	49	50. 2	51. 9	52. <u>0</u> <u>6</u>	53. <u>0</u> 2	54. 👤	55. 756.	5.14	57. 2	58. 🖊	59. <u>O</u>
6th	60. 🖊	61.2	82. <u>J</u>	63. <u>06</u>	64. 02	- 65	66. 2 67.	514	68.2	s9. <u>/</u>	70. <b>QQ</b>
7th	71	72. <b>3</b>	73. 4	74. <u>Ol</u> a	75.02	76. <u>/</u>	77.2 78	152	79. 2	30. <u>/</u>	B1.00
8th	82	83.	84. <u>9</u>	85. <u>O</u> <u>L</u>	86. <u>0</u> 2	87. /	88. 289	514	90.2	91. <u>/</u>	92. <u>O</u>
9th	93	94. 2	95. <u> </u>	96.02	-97. DJ	98	99.	170	0,101. / 10	021	103 <u>0</u>
10th	104.	105	06. 9	07.04	108. <u>0</u> 2	109. 🖊	110.2111	. <u>05 1</u>	112. / 1	131	114.01

ż				OCCU	JPANT: I	NJURY	DATA			•	·
A C				A.I.S 90					Injury	Direct/	Occupant Area
	Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury ( Source	Source Confidence Level	Indirect Injury	Intrusion Number
11th	1	8	9	0)	02	_	2	010		1	00
12th	_/	8	$\mathcal{G}$	04	02	L	1	004	2	_/	<u></u>
13th		8	9	02	02		2	051	1	/	01
14th			_				_	<u> </u>	***************************************		
15 <b>t</b> h							_		_		
1 6 th											<del></del>
17th					<del></del>	_	_				
18th							_		_		
19th						_	_				
20th			_						<del></del>		
21st						_	_				
22nd						_	<del></del> .				<del></del>
23rd		_					_				
24th		_									
25th		_									

# OCCUPANT INJURY CLASSIFICATION

#### **Body Region** Head (2) **Face** (3)Neck (4)Thorax (5)Abdomen Spine (6)**Upper Extremity** (7)(8) Lower Extremity (9) Unspecified Type of Anatomic Structure Whole Area (1)Vessels (2)(3)Nerves (4) Organs (includes Muscles/ligaments) Skeletal (includes

(5)

(6)

(9)

ioints)

Skin

Head - LOC

#### **Specific Anatomic** Structure

Vessels, Nerves, Organs. Bones, Joints are assigned consecutive two digit numbers beginning with 02.

The exceptions to this rule apply to:

#### Whole Area (02) Skin - Abrasion Skin - Contusion (04)(06) Skin - Laceration (08) Skin - Avulsion (10) Amputation (20)Burn (30) Crush (40) Degloving (50) Injury - NFS (90) Trauma, other than

## Head - LOC (02) Length of LOC

mechanical

(04) Level (06) of

(08) Consciousness

(10) Concussion

#### <u>Spine</u> Cervical (02)(04) Thoracic (06) Lumbar

### Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

#### Abbreviated Injury Scale

Minor Injury (1) Moderate Injury (2)Serious Injury (3)(4)Severe Injury Critical Injury (5) Maximum (6)(untreatable)

severity

Injured, unknown

#### Aspect

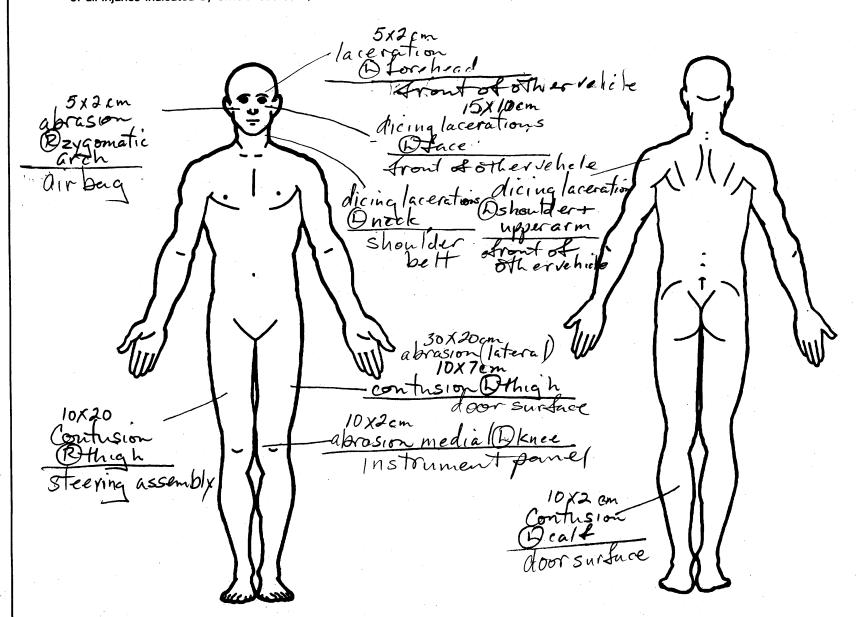
- Right (1)Left (2)
- (3) Bilateral
- Central (4)**Anterior** (5)
- (6) **Posterior**
- (7)Superior
- Inferior (8)
- (9) Unknown Whole region (0)

#### DIRECT/INDIRECT INJURY **INJURY SOURCE SOURCE OF INJURY DATA** CONFIDENCE LEVEL OFFICIAL RECORDS (1)Direct contact injury (1) Autopsy records with or (1) Certain (2) Indirect contact injury (2) Probable without hospital/medical Noncontact injury (3) Possible (3) records Injured, unknown source (2) Hospital/medical records other (9) Unknown than emergency room (e.g., discharge summary) (3) Emergency room records only (including associated X-rays or other lab reports) (4) Private physician, walk-in or emergency clinic **UNOFFICIAL RECORDS** (5) Lay coroner report (6) E.M.S. personnel (7) Interviewee (8) Other source (specify): (9) Police

(7)

		INJURY	SOUR	CES		
FRONT	(102)	Right side hardware or	(183)	Air bag-passenger side and	(411)	Wall mounted head rest
(001) Windshield	, 102/	armrest	,,	object held		(used behind wheel chair)
(OO2) Mirror	(103)	Right A (A1/A2)-pillar	(184)	Air bag-passenger side and	(412)	Other adaptive device
(003) Sunvisor		Right B-pillar	,.04	object in mouth	, ,	(specify):
		Other right pillar (specify):	/195\	Air bag compartment		(Specify)
(004) Steering wheel rim	(100)	Other right plilar (specify).	(100)			
(005) Steering wheel hub/spoke	(100)	Disha sida windawa alam	/106\	cover-passenger side	EVTE	RIOR of OCCUPANT'S
(006) Steering wheel (combination		Right side window glass	(180).	Air bag compartment		
of codes 004 and 005)		Right side window frame		cover-passenger side and	VEHIC	
(007) Steering column,		Right side window sill		eyewear		Hood
transmission selector lever,	(109)	Right side window glass	(187)	Air bag compartment	(452)	Outside hardware (e.g.,
other attachment		including one or more of the		cover-passenger side and		outside mirror, antenna)
(008) Cellular telephone or CB		following: frame, window		.jewelry	(453)	Other exterior surface or
radio		sill, A (A1/A2)-pillar, B-pillar,	(188)	Air bag compartment		tires (specify):
(009) Add on equipment (e.g.,		or roof side rail.		cover-passenger side and		
tape deck, air conditioner)	(110)	Other right side object		object held		
(010) Left instrument panel and		(specify):	(189)	Air bag compartment	(454)	Unknown exterior objects
below				cover-passenger side and		
(011) Center instrument panel and				object in mouth	EXTE	RIOR OF OTHER MOTOR
below	INTER	IIOR	(190)	Other air bag (specify)	VEHIC	CLE
(012) Right instrument panel and	(151)	Seat, back support			(501)	Front bumper
below		Belt restraint	(195)	Other air bag compartment	(502)	Hood edge
(013) Glove compartment door	, , , , , , , ,	webbing/buckle		cover (specify)		Other front of vehicle
(014) Knee bolster	(153)	Belt restraint B-pillar or door		, (op. 1.1)	(333)	(specify):
(015) Windshield including one or	(100)	frame attachment point				(opeo),,
more of the following: front	(154)	Other restraint system	ROOF		75041	Hood
	(104)	· ·		Front header		Hood ornament
header, A (A1/A2)-pillar,		component (specify):			,	
instrument panel, mirror, or				Rear header		Windshield, roof rail, A-pilla
steering assembly (driver		Head restraint system		Roof left side rail	•	Side surface
side only)	(160)	Other occupants (specify):		Roof right side rail	(508)	
(016) Windshield including one or			(205)	Roof or convertible top	(509)	•
more of the following: front	7 .	Interior loose objects				(specify):
header, A (A1/A2)-pillar,	(162)	Child safety seat (specify):	FLOO	₹		
instrument panel, or mirror			(251)	Floor (including toe pan)	(510)	Rear surface
(passenger side only)	(163)	Other interior object	(252)	Floor or console mounted	(511)	Undercarriage
(017) Windshield reinforced by		(specify):		transmission lever, including	(512)	Tires and wheels
exterior object (specify)				console	(513)	Other exterior of other
			(253)	Parking brake handle		motor vehicle (specify):
(O19) Other front object (specify):	AIR B	AG	(254)	Foot controls including		
	. (170)	Air bag-driver side		parking brake		
	(171)	Air bag-driver side and			(514)	Unknown exterior of other
LEFT SIDE		eyewear	REAR			motor vehicle
(051) Left side interior surface,	(172)	Air bag-driver side and		Backlight (rear window)		
excluding hardware or	,,,_,	jewelry		Backlight storage rack,	OTHE	R VEHICLE OR OBJECT IN
armrests	(172)	Air bag-driver side and	,502/	door, etc.		ENVIRONMENT
(052) Left side hardware or	(173)	object held	13031	Other rear object (specify):		Ground
armrest	11741	Air bag-driver side and	(303)	Other rear object (specify):		4
	(1/4)				(080)	Other vehicle or object
(053) Left A (A1/A2)-pillar	14 440.	object in mouth	454-	TIVE (ACCIOTATE COMMIS		(specify):
(054) Left B-pillar	(1/5)	Air bag compartment		TIVE (ASSISTIVE) DRIVING	,,,,,,	11.1.
(055) Other left pillar (specify):		cover-driver side		MENT	(599)	Unknown vehicle or object
1050) 1-10-11	(176)	Air bag compartment	(401)	Hand controls for		
(056) Left side window glass		cover-driver side and		braking/acceleration		CONTACT INJURY
(057) Left side window frame		eyewear	(402)	Steering control devices		Fire in vehicle
(058) Left side window sill	(177)	Air bag compartment		(attached to OEM steering		Flying glass
(059) Left side window glass		cover-driver side and jewelry		wheel)	(603)	Other noncontact injury
including one or more of the	(178)	Air bag compartment	(403)	Steering knob attached to		source
following: frame, window		cover-driver side and object		steering wheel		(specify):
sill, A (A1/A2)-pillar, B-pillar,		held	(405)	Replacement steering wheel	(604)	Air bag exhaust gases
or roof side rail.	(179)	Air bag compartment		(i.e., reduced diameter)	(697)	Injured, unknown source
(060) Other left side object		cover-driver side and object	(406)	Joy stick steering controls		
(specify):		in mouth		Wheelchair tie-downs		
• •	(180)	Air bag-passenger side		Modification to seat belts,		
-		Air bag-passenger side and	,	(specify):		
RIGHT SIDE	,,,,,,,	eyewear	IANO	Additional or relocated		
(101) Right side interior surface,	/192	Air bag-passenger side and	,+031	switches, (specify):	•	•
excluding hardware or	1102	jewelry		awitches, (specify):		
<del>-</del>		je well y	1446	Pained seef		
armrests			(410)	Raised roof		

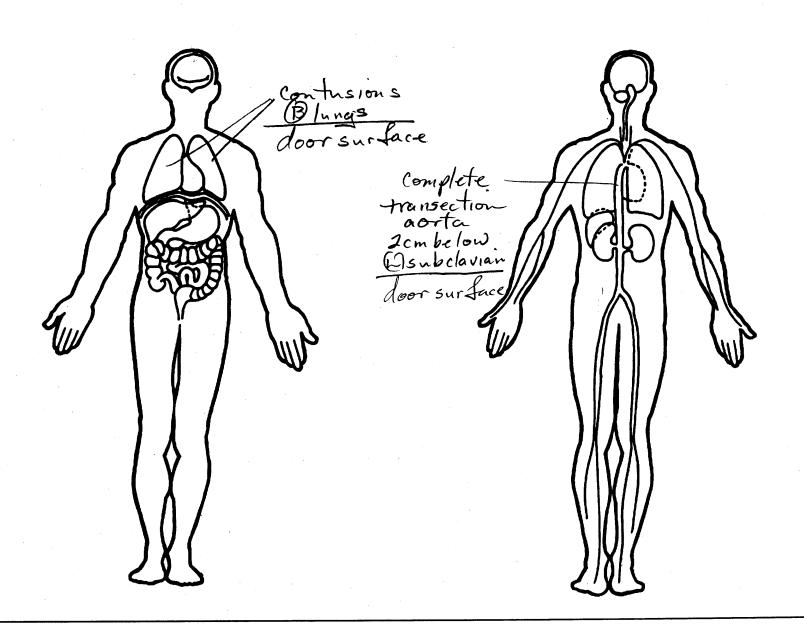
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



raye

-	OFFICIAL INJURY DATA — SKELETAL INJURIES
Restrained? No Yes	Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)
Blood Alcohol Level (mg/dl) BAL =	contusion Dtemporalis muscle roof side rail
Glasgow Coma Scale Score GCSS = 1/4	Side surface hemothorax
Units of Blood Given Units =	nemothors 300 m/B 550 m/B
Arterial Blood Gases  pH = PO <sub>2</sub> =	
PCO₂ HCO₃	

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

				rage 2
	PRECRASH ENVIRONMENTAL DATA			,
		25	Roadway Surface Condition	( )
19.	Relation To Interchange Or Junction 2		(1) Dry	<del>/</del>
١٠٠.	(O) Non interchange of Juliction	-	(2) Wet	
1	(0) Non-interchange area and non-junction	ŀ		i
1	(1) Interchange area related		(3) Snow or slush	
l		ı	(4) ice	
ł	Non-Interchange junctions		(5) Sand, dirt, or oil	
1	(2) Intersection related		(8) Other (specify):	
		ı	(9) Unknown	
	(3) Driveway, alley access related	ı	(3) Unknown	
1	(4) Other junction (specify)			
Ì	·		Links O Pol	1
	(5) Unknown type of junction	120	. Light Conditions	
1	to, changing type of junction	- 1	(1) Daylight	
1	/O\ 11-1		(2) Dark	
	(9) Unknown		(3) Dark, but lighted	
l				
ŀ			(4) Dawn	
20	Trafficway Flow	1	-(5) Dusk	
20.		-	(9) Unknown	
	(0) Not physically divided (two way traffic)	1		
	(1) Divided trafficway-median strip without	- 1		
	positive barrier	07		$\sim$
İ	(2) Divided trafficway-median strip with positive	2/	. Atmospheric Conditions	$\mathcal{O}$
	besies	ı	(0) No adverse atmospheric-related driving	
	barrier	1	conditions	
l	(3) One way traffic		(1) Rain	
	(9) Unknown	- 1	• •	
İ	•	i	(2) Sleet/hail	
l		- 1	(3) Snow	
21.	Number Of Travel Lanes		(4) Fog	
	(1) One	- 1	(5) Rain and fog	
		- 1		
Ì	(2) Two	l	(6) Sleet and fog	
	(3) Three		(7) Other (e.g., smog, smoke, blowing sand	or
	(4) Four		dust, etc.) (specify):	
İ	(5) Five			
	(6) Six		(9) Unknown	
		- 1	(O) CHRIIOWII	
	(7) Seven or more	1	<b>-</b>	1
	(9) Unknown	28	. Traffic Control Device	₹-
		İ	(0) No traffic control(s)	
j	1		(1) Traffic control signal (not RR crossing)	
22.	Roadway Alignment		(1) The delited digital (not full crossing)	
	(1) Straight	-	On more land a more	
	(2) Curve right		Regulatory	
		ı	(2) Stop sign	
	(3) Curve left		(3) Yield sign	
	(9) Unknown		(4) School zone sign	
		1	(5) Other regulatory sign (and sign)	
		1	(5) Other regulatory sign (specify):	
	Roadway Profile			
	(1) Level	-	(6) Warning sign (not RR crossing)	
	(2) Uphill grade (>2%)		(7) Unknown sign	
	(3) Hill crest	ŀ	(8) Miscellaneous/other controls including R	D
		1 :	controls (and site)	in
	(4) Downhill grade (>2%)	1	controls (specify):	•
	(5) Sag	*		
	(9) Unknown		(9) Unknown	
	· · · · · · · · · · · · · · · · · · ·			
	ı	1		
24.	Roadway Surface Type	20	Troffin Control Davies Francis	2
	(1) Concrete	.   <sup>29</sup>	. Traffic Control Device Functioning	$\leq$
			(O) No traffic control device	-
	(2) Bituminous (asphalt)		(1) Traffic control device not functioning	
	(3) Brick or block		(specify):	
	(4) Slag, gravel, or stone	1	(2) Traffic control device functioning proper	1
	(5) Dirt	1 "		ıy
	(8) Other (specify):		(9) Unknown	
		1		
	(9) Unknown			

National Accident Sampling System-Crashworthiness Data System: General Vehicle Form Page 5 **OCCUPANT RELATED** 44. Vehicle Cargo Weight Code weight to nearest 37. Driver Presence in Vehicle 10 kilograms. Less than 5 kilograms (0) Driver not present (000)(450)4,500 kilograms or more (1) Driver present (9) Unknown (999)Unknown 38. Number of Occupants This Vehicle Source! (00-96) Code actual number of occupants for this vehicle **ROLLOVER DATA** (97) 97 or more 00 (99) Unknown 45. Rollover (00) No rollover (no overturning) 39. Number of Occupant Forms Submitted Rollover (primarily about the longitudinal axis) AIR BAG RELATED Code the number of quarter turns (01-16)Rollover, 17 or more quarter turns (17)40. Is this an AOPS Vehicle? (specify): No (includes unknown) (98)Rollover--end-over-end (i.e., primarily Yes - researcher determined about the lateral axis) (1) VIN determined air bag system Rollover (overturn), details unknown (99)(2) VIN determined automatic (passive) belts (3)VIN determined air bag and automatic 46. Rollover Initiation Type (4) (00) No rollover (passive) belts (01) Trip-over 41. Air Bag(s) Deployment, First Seat Frontal (02) Flip-over (0) Not equipped or not available (03) Turn-over (1) No air bags deployed (04) Climb-over (05) Fall-over Single Air Bag Vehicle
(2) Driver air bag deployed (06) Bounce-over (07) Collision with another vehicle Driver air bag, unknown if deployed (08) Other rollover initiation type specify): Multiple Air Bag Vehicle Driver side only deployed (98) Rollover--end-over-end Passenger side only deployed (99) Unknown rollover initiation type (5)Driver and passenger side deployed  $\bigcirc$ Driver and passenger side unknown if 47. Location of Rollover Initiation deployed (O) No rollover Air bag(s) deployed, details unknown On roadway On shoulder—paved On shoulder—unpaved Unknown (2) (3) 0 On roadside or divided trafficway median 42. Air Bag(s) Deployment, Other Than First (4)Rollover--end-over-end Seat Frontal (8) Not equipped with an "other" air bag (9) Unknown Deployed during accident (as a result of (1)  $\bigcirc$ 48. Rollover Initiation Object Contacted impact) Deployed inadvertently just prior to accident (Note: Applicable codes on back of page) Deployed, details unknown (3) Deployed as a result of a noncollision event 49. Location on Vehicle Where Initial Principal during accident sequence (e.g., fire, Tripping Force Is Applied explosion, electrical) No rollover (0)Unknown if deployed (5)(1)Wheels/tires Nondeployed Side plane Unknown (3) End plane Undercarriage (4) Other location on vehicle (specify): Specify type of "other" air bag present: Non-contact rollover forces (specify): (6) Rollover--end-over-end **VEHICLE WEIGHT ITEMS** (9) Unknown 50. Direction of Initial Roll Vehicle Curb Weight No rollover 43. (O) Roll right - primarily about the longitudinal Code weight to nearest 10 kilograms. Roll left - primarily about the longitudinal (045) Less than 450 kilograms

axis

(8)

(9)

Rollover--end-over-end

Unknown roll direction

(610) 6,100 kilograms or more

 $\frac{7.7 \text{ lbs X}}{4536} = \frac{2.1.2}{4536}$  kgs

(999), Unknown

Source: `

# **CODES FOR ROLLOVER INITIATION OBJECT CONTACTED**

(00) No rollover (01-30) — Vehicle Number	(57) Fence (58) Wall
(01-30) — Vehicle Number	(59) Wall (59) Building
Noncollision	(60) Ditch or culvert
(31) Turn-over — fall-over	(61) Ground
(32) No rollover impact initiation (end-over-end)	(62) Fire hydrant
(34) Jackknife	(63) Curb
	(64) Bridge
Collision With Fixed Object	(68) Other fixed object (specify):
(41) Tree (≤ 10 cm in diameter)	
(42) Tree (> 10 cm in diameter)	(69) Unknown fixed object
(43) Shrubbery or bush	
(44) Embankment	Collision with Nonfixed Object
	(70) Passenger car, light truck, van, or other
(45) Breakaway pole or post (any diameter)	vehicle not in-transport
, , , , , , , , , , , , , , , , , , , ,	(71) Medium/heavy truck or bus not in-transport
Nonbreakaway Pole or Post	(76) Animal
(50) Pole or post (≤ 10 cm in diameter)	(77) Train
(51) Pole or post (> 10 cm but ≤ 30 cm in	(78) Trailer, disconnected in transport
diameter)	(79) Object fell from vehicle in-transport
(52) Pole or post (> 30 cm in diameter)	(88) Other nonfixed object (specify):
(53) Pole or post (diameter unknown)	(OU) Other Hollinged Object (Specify).
(30) Tole of post (diameter diknowit)	(89) Unknown nonfixed object
(EA) Concrete treffic harrier	(69) Olikilowii nolilixed object
(54) Concrete traffic barrier	(00) Other court (creeify)
(55) Impact attenuator	(98) Other event (specify):
(56) Other traffic barrier (includes guardrail)	
(specify):	(99) Unknown event or object
•	



	t of Transportation  by Traffic Safety	EX	TERIOR	VEHIC	CLE FO	ORM	NAT			SAMPLING ESS DATA	
,	y Sampling Unit Nu	mber	49	3.	Vehicle	Numbe	r	in the second		0	2
2. Case N	Number - Stratum	_/	201	1							
			VEHICLE I	DENTI	CATION	NC					
VIN /	FTEE	145	/ / 5	H	and the second second	-		, 1	Model Y	'ear <u>9</u>	5
	ke (specify):				Vehicle N	Model (s	pecify):			150	
	r manage transport the second second second	( - W .		DCATO						, per 10	
Locate the	end of the damage	with respe				center	ine or b	umper c	orner f	or end in	npacts
Specific Impa	ct No. Location	of Direct Dama			Location			L	ocation o	of Max Cru	ısh
1	ENTIRE	FRONTAL	PLANE	SAME	As L	IREC	<u> </u>				<u></u>
		PER BO	OY MAN)		-	·····					
			/								
		CRU	SH PROFI	LE IN	CENTIN	IETER:	S				
t s	Free space value is the individual C localide taper, etc. Rec	tions. This ord the val	may includue for each	e the fol C-measu	lowing: rement	bumper and ma	lead, be ximum d	umper t	oody co aper, si	ontour ta	ken a
Specific Impact Number	Plane of Impact C-Measurements	Width (CDC)	Damage Max Crush	Field L	C,	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	±C
1	FRONT	,,,,,,		VEH	ICLE	TAK	EN A	PART			
				1 4 4				<u> </u>		Ź	
		<u> </u>	<u> </u>							A.	
		1		n n					-		╂
			<del> </del>								+
										\$1 41	1
				T i							<b>†</b>
										Ē.	
										3	
		7.		- 1 15						. ¥.	

# ORIGINAL SPECIFICATIONS WORK SHEET

/ 3 8 .O inches	x 2.54	=	<u>351_cm</u>
211.8 inches	x 2.54	=	<u>538</u> cm
<u>7 9 .5</u> inches	x 2.54	=	2 <u>0</u> 2 cm
$\underline{4}, \underline{677}$ pounds	x .4536	=	2, 121 kg
<u>&amp;</u> inches	x 2.54	=	<u>/ 7 4</u> cm
inches	x 2.54	=	cm
inches	x 2.54	=	cm
inches	x 2.54	=	cm
cc	x .001	=	L
CID	x .0164	=	L
	211.8 inches	2 1 1 8 inches x 2.54  7 9 5 inches x 2.54  4,677 pounds x .4536  68 5 inches x 2.54  inches x 2.54  inches x 2.54  inches x 2.54  inches x 2.54  cc x .001	inches x 2.54 =inches x 2.54 =cc x .001 =

#### VEHICLE DAMAGE SKETCH **ORIGINAL SPECIFICATIONS** WHEEL STEER ANGLES TIRE-WHEEL DAMAGE (For locked front wheels or a. Rotation physically b. Tire Wheelbase cm displaced rear axles only) restricted deflated RF ± \_ \_ \_ 0 LF ± \_ 0 \_ 0 RR ± \_ \_ \_ 0 538 Overall Length cm RF 2 202 Maximum Width cm LR ± \_\_\_\_ 0 **Curb Weight** kg Within ± 5 degrees cm **Average Track** (1) Yes (2) No (8) NA (9) Unk. **DRIVE WHEELS** 70 Front Overhang cm 117 ☐ FWD ☒ RWD ☐ 4WD cm TYPE OF TRANSMISSION Rear Overhang ☐ Manual 178 **Undeformed End Width** cm Approximate END SHIFT ≥ 10 CM Cargo Weight 150 kg Tools - Pluming Supplies ☐ Yes □ No unh **MEASUREMENTS IN CENTIMETERS** POSSIOLE ARC DAMAGE Original - Bumper height POST-CRASH **Bumper corner** 0 2 Bumper corner Stringline Stringline POST-CRASH Bumper corner 108 **Bumper corner** Stringline Stringline

NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

			CDC W	ORKSHEE	. U						
CODES FOR OBJECT CONTACTED											
(01-30)	- Vehicle Nu	mber		(57)	Fence						
(0.00)	10,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Wali						
Noncoll	ision				Building						
		ollover (excludes	end-over-en		Ditch or	culvert					
	Rollover-end		0114 0101 011		Ground						
	Fire or explosi				Fire hydr	ant					
	Jackknife				Curb						
		t damage (specif	·/·		Bridge						
(33)	Other miliaum	t damage (specii	<b>y</b> ,.			ed object (s	necify):				
/28\	Noncollision in	niury	<del></del>	(00)		00,000 (0	poon, , , .				
	Other noncolli			(69)	Unknow	n fixed obje	ct				
(39)	Noncollision -	– details unknov	/n	Collisi	on with No	nfixed Obje	ct				
• • • • •				(70)	Passenge	er car, light	truck, van,	or other			
Collisio	n With Fixed O	bject			vehicle r	ot in-transp	ort				
	Tree (≤ 10 c			(71)				in-transport			
	Tree (> 10 c				Pedestria			•			
	Shrubbery or				Cyclist o						
	Embankment						r conveyand	e			
(45)	Breakaway po	ole or post (any o	diameter)		Vehicle (	occupant		<del></del>			
					) Animal						
Nonbre	akaway Pole o	r Post		(77	) Train	Train					
(50)	Pole or post (	≤ 10 cm in dian	neter)		Trailer, disconnected in transport						
(51)	Pole or post (	> 10 cm but ≤	30 cm in	(79	) Object fell from vehicle in-transport						
	diameter)			(88)	) Other no	onfixed object	ct (specify):				
(52)	Pole or post (	> 30 cm in dian	neter)			_					
		diameter unknov		(89	(89) Unknown nonfixed object						
	Concrete traf			(98	(98) Other event (specify):						
	Impact attenu	uator barrier (includes	quardrail)	(99) Unknown event or object							
(33)			_	,,,,,	,						
		DEFORMA	TION CLASS	IFICATION B	/ FVFNT N	UMRER					
•		DEI OTIIVITY			(4)	(5)					
Acciden	t	(1) (2)			Specific	Specific	(6)				
Event		Direction	Incremental		Longitudinal	Vertical or	Type of	(7)			
Sequenc	•	of Force	Value of	Deformation	or Lateral	Lateral	Damage	Deformation			
Number	r Contacted	(degrees)	Shift	Location	Location	Location	Distribution	Extent			
01	21	0 40	00	F	D	E	$\overline{\omega}$	01			
				<del></del>				<del></del>			
		<del></del>									
				<del></del>			<del></del>				
<del></del>											
			<del></del>								
I											

lational Accid	ent Sampling	System-Crash	worthiness Dat	a System: Exte	erior Vehicle F	orm	Page 4	
			DEFORMA'					
HIGHEST C	DELTA "V"							
Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent	
4	5. 0 1	6. 99	7. <u>9</u>	8. <u>9</u>	9. 9	109	11.99	
Second Hi	ghest Delta "V	и .		<del>-</del>				
12	13	14	15	16	17	18	19	
		CPII	SH PROFILE	IN CENTIN	IETERS			
HIGHEST	DELTA "V"	ohilare shace	below. (ALL N	MEAGONEIVIEIV	O AIL III OL			
20. 	21. C <sub>1</sub>				C <sub>5</sub>	C <sub>6</sub>	22. 	
Second H	 ighest Delta "\			<u> </u>			+	
23. 	24. 			C <sub>4</sub>		C <sub>6</sub>	25. 	
						<del></del> -	+-	
(Code impac (250) (998)	250 centimet No highest se	t severity le impact.) learest centime ers or more		(650) (999)	Unknown		3 5 /	
(999) Unknown  27. Direct Damage Width (For highest severity impact)  Code to the nearest centimeter (250) 250 centimeters or more (999) Unknown				(185)	29. Original Average Track Width  Code to the nearest centimter  (185) 185 centimeters or more (999) Unknown  S S inches X 2.54 = 1.74 centimeters			

	FUEL SYSTEM
30. Are CDCs Documented but Not Coded on The Automated File? (0) No (1) Yes  31. Researcher's Assessment of Vehicle Disposition (0) Not towed due to vehicle damage (1) Towed due to vehicle damage (9) Unknown  32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? (0) No post manufacturer modifications	
(1) Yes - post manufacturer modifications (specify): CARCO YAN - TOOL  BOXES - SAFETY CAGE  (Include photograph of CERTIFICATION PLACARD in case report) (9) Unknown if vehicle is modified  FIRE OCCURRENCE	37. Type of Fuel Tank-1  38. Type of Fuel Tank-2 (0) No fuel tank (electrical vehicle) (1) Metallic (2) Non-metallic (9) Unknown  39. Location of Fuel Tank-1  40. Location of Fuel Tank-2
33. Fire Occurrence (0) No fire  Yes, fire occurred (1) Minor (2) Major (9) Unknown  34. Origin of Fire (0) No fire (1) Vehicle exterior (front, side, back, top) (2) Exhaust system (3) Fuel tank (and other fuel retention system parts) (4) Engine compartment (5) Cargo/trunk compartment (6) Instrument panel (7) Passenger compartment area (8) Other location (specify): (9) Unknown	(0) No fuel tank (1) Aft of center of the rear wheels (rear axie) centered (2) Aft of center of the rear wheels (rear axie) left side (3) Aft of center of the rear wheels (rear axie) right side (4) Forward of center of the rear wheels (rear axie) centered

National Accident Sampling System-Crashworthiness Data System: Exterior Vehicle I
---

atio	nai Accident Sampling System Crushwerth		, 	
43.	Leakage Location of Fuel System-1			nis Vehicle Equipped With More Than
44.	Leakage Location of Fuel System-2	0		No (one or two tanks only)
	(0) No fuel tank		Ves	- More Than Two Tanks
	(1) No fuel leakage			Yes no damage to any tank or filler
			[ '''	cap and no fuel system leakage
	Primary Area Of Leakage		1	Cap and no luci system leakage
	(2) Tank		(2)	
	(3) Filler neck		ì	cap but there is fuel system leakage
	(4) Cap		ļ	(specify leakage location):
	(5) Lines/pump/filter		1	
	(6) Vent/emission recovery		(3)	
	(8) Other (specify):			filler cap and there is fuel system leakage
	(9) Unknown		1	(specify the following):
	(9) Olikilowii			Type of tank
				Tank location
. –	F 17 4	01		Filler cap location
45.	Fuel Type-1	<u> </u>		
•	_	00		Tank damage
46.	Fuel Type-2	<u>U</u> <u>U</u>		Location of leakage
				Type of fuelUnknown if more than two tanks
	Single Fuel Type		(9)	Unknown if more than two tanks
	(00) No fuel tank		1	
	(01) Gasoline			
	(O2) Diesel	•		
	(03) CNG (Compressed Natural Gas)		1	COMMENTS
	(04) LPG (Liquid Petroleum Gas) also		1	
	known as Propane			
	(05) LNG (Liquid Natural Gas)			
			1	
	(06) Methanol (M100 or M85)			
	(07) Ethanol (E100 or E85)			
	(08) Other (Hydrogen or others) (specify):			
	Electric Powered or Electric/Solar			
	Powered Vehicles			
Ī	(10) Lead Acid Battery			
	(11) Nickel-Iron Battery			
	(12) Nickel-Cadmium Battery			
	(13) Sodium Metal Chloride Battery			
l	(14) Sodium Sulfur Battery			
	(18) Other (Specify):			
	(98) Other Hybrid (specify):			
	(99) Unknown fuel type		-	
			_	
	*** STOP: IF THE CDS A	PPLICAE	BLE VEH	ICLE WAS NOT TOWED ***

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED \*\*\*

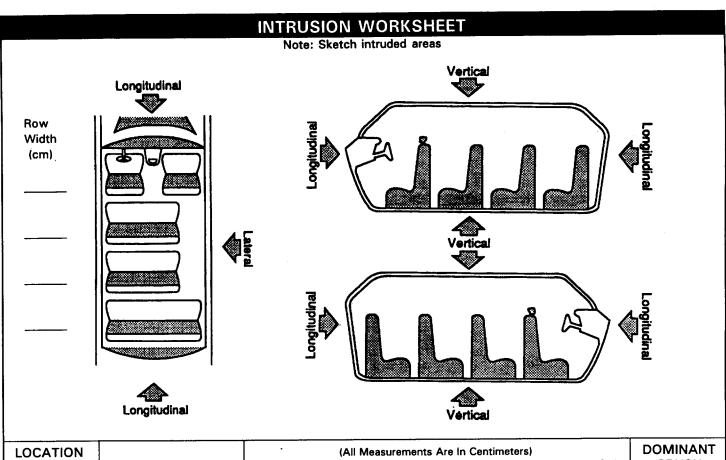
(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

(8) Glazing disintegrated by occupant contact (9) Unknown if contacted by occupant

National Highway Traffic Safety

dministration	GLAZING
1. Primary Sampling Unit Number $49$	Type of Window/Windshield Glazing
2. Case Number - Stratum 120A	15. WS $\frac{1}{2}$ 16. LF $\frac{2}{2}$ 17. RF $\frac{2}{2}$ 18. LR $\frac{2}{2}$ 19. RR $\frac{2}{2}$
3. Vehicle Number <u>0 2</u>	20. BL <u>2</u> 21. Roof <u>0</u> 22. Other <u>2</u>
INTEGRITY  4. Passenger Compartment Integrity (00) No integrity loss  Yes, Integrity Was Lost Through (01) Windshield (02) Door (side) (03) Door/hatch (back door)	<ul> <li>(0) No glazing</li> <li>(1) AS-1 — Laminated</li> <li>(2) AS-2 — Tempered</li> <li>(3) AS-3 — Tempered-tinted (original)</li> <li>(4) AS-2 — Tempered-with after market tint</li> <li>(5) AS-3 — Tempered-tinted (with additional after market tint)</li> <li>(6) AS-14 — Glass/Plastic</li> <li>(7) Glazing removed prior to accident</li> <li>(8) Other (specify):</li> </ul>
(04) Roof (05) Roof glass (06) Side window	(9) Unknown
(06) Side window (07) Rear window (backlight) (08) Roof and roof glass (09) Windshield and door (side)	Window Precrash Glazing Status 23. WS $\frac{1}{2}$ 24. LF $\frac{1}{4}$ 25. RF $\frac{2}{2}$ 26. LR $\frac{0}{2}$ 27. RR $\frac{1}{2}$
(10) Windshield and roof (11) Side and rear window (side window and backlight)	28. BL / 29. Roof / 30. Other /
<ul><li>(12) Windshield and side window</li><li>(13) Door and side window</li><li>(98) Other combination of above (specify):</li></ul>	(O) No glazing (1) Fixed (2) Closed
(99) Unknown	(3) Partially opened (4) Fully opened (7) Glazing removed prior to accident (9) Unknown
Door, Tailgate or Hatch Opening	Glazing Damage from Impact Forces
5. LF 6. RF 7. LR 8. RR 9. TG/H	31. WS / 32. LF / 33. RF / 34. LR / 35. RR /
(0) No door/gate/hatch (1) Door/gate/hatch remained closed and operational (2) Door/gate/hatch came open during collision (3) Door/gate/hatch jammed shut (8) Other (specify):  (9) Unknown	36. BL 37. Roof 38. Other
Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø	(7) Glazing removed prior to accident (9) Unknown if damaged
10. LF $\underline{\mathcal{O}}$ 11. RF $\underline{\mathcal{O}}$ 12. LR $\underline{\mathcal{O}}$ 13. RR $\underline{\mathcal{O}}$ 14. TG/H $\underline{\mathcal{O}}$	Glazing Damage from Occupant Contact
(0) No door/gate/hatch or door not opened	39. WS / 40. LF / 41. RF / 42. LR / 43. RR /
Door, Tailgate or Hatch Came Open During Collision (1) Door operational (no damage) (2) Latch/striker failure due to damage (3) Hinge failure due to damage (4) Door structure failure due to damage (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage (6) Latch/striker and hinge failure due to damage (8) Other failure (specify):	44. BL / 45. Roof  46. Other    (0) No glazing (1) No occupant contact to glazing (2) Glazing contacted by occupant but no glazing damage (3) Glazing in place and cracked by occupant contact (4) Glazing in place and holed by occupant contact (5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact (6) Glazing out-of-place by occupant contact (7) Glazing removed prior to accident



LOCATION OF INTRUSION	INTRUDED COMPONENT	COMPARISON	IN	nts Are In Centimeters) FRUDED /ALUE =	INTRUSION	DOMINANT CRUSH DIRECTION
		-	_	=		
		-	_			
			- /	=		
			_/	=		
		/-	_	<u></u>		
		-		=		
		-		=		
		-	_	=		
		-	_	=		
		-	_	=		
			_	=		
	The state of the s	-	_	=		
		-		=		
			<del> </del>	=		
		-		=		

#### OCCUPANT AREA INTRUSION INTRUDING COMPONENT Note: If no intrusions, leave variables IV47-IV86 blank. Interior Components Dominant (01) Steering assembly Magnitude Crush Location of Intruding (02) Instrument panel left Direction of Intrusion Intrusion Component (03) Instrument panel center (04) Instrument panel right (05) Toe pan 49. 50. 1st 47. \_\_\_ 48.\_\_\_ (06) A (A1/A2)-pillar (07) B-pillar (08) C-pillar (09) D-pillar 2nd 51.\_\_\_\_ 52.\_\_ 53. (10) Side panel - forward of the A1/A2-pillar (11) Door panel (side) (12) Side panel - rear of the B-pillar (13) Roof (or convertible top) <sup>′</sup>57. 56. (14) Roof side rail (15) Windshield (16) Windshield header 60. (17) Window frame (18) Floor pan (includes sill) (19) Backlight header (20) Front seat back 65. 66. 64. (21) Second seat back (22) Third seat back (23) Fourth seat back (24) Fifth seat back 68. (25) Seat cushion (26) Back door/panel (e.g., tailgate) (27) Other interior component (specify): / 72.\_\_\_\_ **Exterior Components** (30) Hood (31) Outside surface of this vehicle (specify): 8th 75.\_\_\_ 76.\_\_ 77.\_\_ (32) Other exterior object in the environment (specify): (33) Unknown exterior object 9th 79. \_\_\_\_ 80. \_\_\_\_ 81. \_\_\_ 82. \_\_ (97) Catastrophic (98) Intrusion of unlisted component(s) (specify): 10th 83. 84. 85. 86. (99) Unknown MAGNITUDE OF INTRUSION LOCATION OF INTRUSION (1) ≥ 3 centimeters but < 8 centimeters Fourth Seat (2) $\geq$ 8 centimeters but < 15 centimeters Front Seat (41) Left (3) $\geq$ 15 centimeters but < 30 centimeters (11) Left (42) Middle (4) $\geq$ 30 centimeters but < 46 centimeters (12) Middle (43) Right (5) ≥ 46 centimeters but < 61 centimeters (13) Right (6) $\geq$ 61 centimeters (97) Catastrophic Second Seat (7) Catastrophic (98) Other enclosed (21) Left (9) Unknown area (specify) (22) Middle (23) Right (99) Unknown DOMINANT CRUSH DIRECTION Third Seat (1) Vertical (31) Left (2) Longitudinal (32) Middle (3) Lateral (33) Right (7) Catastrophic

(9) Unknown

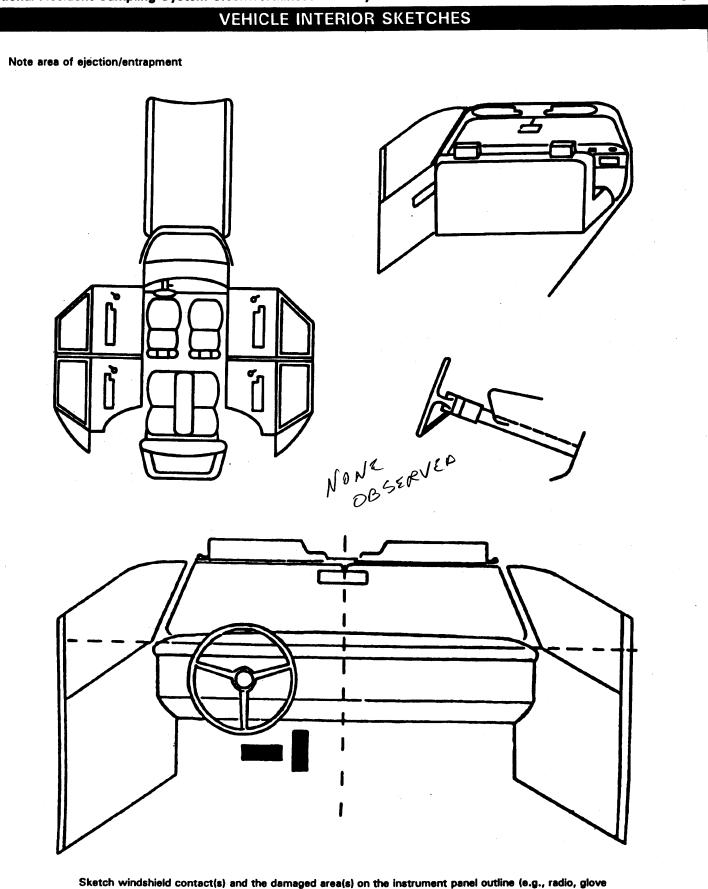
(All Measurements Are in Centimeters)					
COMPARISON VALUE	_	DAMAGE VALUE	=	DEFORMATION	
	_		=		
	_		=		
	_		=		
	_		=		

STEERING COLUMN	INSTRUMENT PANEL
87. Steering Column Type (1) Fixed column	92. Odometer Reading 999,000
(2) Tilt column (3) Telescoping column	kilometers Code to the nearest 1,000 kilometers
(4) Tilt and telescoping column	(000) No odometer (001) Less than 1,500 kilometers
(8) Other column type (specify):	(500) 499,500 kilometers or more (999) Unknown
(9) Unknown	miles X 1.6093 = kilometers
88. Tilt Steering Column Adjustment	Source:
(0) No tilt steering column (1) Full up	93. Instrument Panel Damage from Occupant Contact?
(2) Between full up and center (3) Center	(O) No (1) Yes
(4) Between center and full down (5) Full down	(9) Unknown
(9) Unknown	94. Type of Knee Bolster Covering (0) No knee bolster
99. Tologgoping Steering Column Adjustment	(1) Padded
(0) No telescoping steering column	(2) Rigid plastic (8) Other (specify):
(1) Full back (2) Between full back and midpoint	(9) Unknown
(3) Midpoint (4) Between midpoint and full forward	95. Knee Bolsters Deformed from Occupant Contact?
(5) Full forward (9) Unknown	(0) No knee bolster (1) No deformation
	(2) Yes - deformation (9) Unknown
90. Steering Rim/Spoke Deformation  Code actual measured	96. Did Glove Compartment Door Open
deformation to the nearest centimeter (00) No steering rim deformation	During Collision(s)?  (0) No glove compartment door
(01-14) Actual measured value in centimeters (15) 15 centimeters or more	(1) No - door did not open (2) Yes - door opened
(98) Observed deformation cannot be measured (99) Unknown	(9) Unknown
	97. Adaptive (Assistive) Driving Equipment (0) No adaptive driving equipment
91. Location of Steering Rim/Spoke  Deformation	(1) Adaptive driving equipment installed (Check all that apply.)
(00) No steering rim deformation	[ ] Hand controls for braking/acceleration [ ] Steering control devices (attached to OEM
Quarter Sections (01) Section A	steering wheel [] Steering knob attached to steering wheel
(02) Section B (03) Section C	[ ] Low effort power steering (unit or device) [ ] Replacement steering wheel (i.e., reduced diameter)
(04) Section D	[ ] Joy-stick steering controls [ ] Wheelchair tie-downs
Half Sections (05) Upper half of rim/spoke	[] Modification to seat belts (specify):
(06) Lower half of rim/spoke (07) Left half of rim/spoke (08) Right half of rim/spoke	[ ] Additional or relocated switches (specify):
(09) Complete steering wheel collapse	[ ] Raised roof [ ] Wall-mounted head rest (used behind
(10) Undetermined location	wheelchair) [ ] Other adaptive device (specify):
(99) Unknown	(9) Unknown

compartment, damage to instrument panel structure.

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.



		Р	OINTS OF OC	CUPANT CONTACT		
	Interior Component	Occupa No. I	lf   Īf	Supporting Physical	F. idanaa	Confidence Level of Contact
Contact	Contacted	Know	vn Known	Supporting Physical I	zvidence	Point
A		<u> </u>				
B				,		
<u> </u>		ļ <del></del>		/		
<u>D</u>				/		
<u> </u>				/		
F						
G	·					
Н						
1						
J			/			
K						
L	·					
М		L				
N						
of codes Cooperation of Cooperation of Cooperation	wheel hub/spoke wheel (combination DO4 and OO5)  ansmission wer, other at lephone or CB quipment(e.g., tape conditioner) ment panel and atrument panel and atrument panel and apartment door ter d including one or te following: front (A1/A2)-pillar, t panel, mirror, or sembly (driver d including one or te following: front (A1/A2)-pillar, t panel, or mirror t panel, or mirror r side only)	(052) L (053) L (054) L (055) C (056) L (057) L (058) L (059) L (059) L (101) R (101) R (102) R (103) R (104) R (105) C (106) R (107) R (108) R (109) R (109) R	Left side interior surface, excluding hardware or armrests. Left A (A1/A2)-pillar Left B-pillar (specify): Left side window glass Left side window glass. Left side window glass left side window sill Left side window sill Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar or roof side rail. Deter left side object specify):  SIDE Right side interior surface, excluding hardware or immests Right A (A1/A2)-pillar light B-pillar (specify):  Right B-pillar (specify):  Right side window glass light side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar or roof side rail. Deter right side object specify):	(163) Other interior object (specify):  AIR BAG (170) Air bag-driver side (175) Air bag compartment cover-driver side (180) Air bag-passenger side (185) Air bag compartment cover-passenger side (190) Other air bag (specify)  (195) Other air bag compartment cover (specify)  ROOF (201) Front header (202) Rear header (203) Roof left side rail (205) Roof or convertible top (7, FLOOR (251) Floor (including toe pan) (252) Floor or console mounted transmission lever, including console	door, etc.  (303) Other rear obje  ADAPTIVE (ASSISTIVE QUIPMENT  (401) Hand controls braking/acceler  (402) Steering control (attached to Olymbeel)  (403) Steering knob a steering wheel  (405) Replacement state (1.e., reduced do 1.e., reduced do 1.e., reduced do 1.e., reduced do 1.e., reduced do 1.e., reduced do 1.e., reduced do 1.e., reduced do 1.e., reduced do 1.e., reduced do 1.e., reduced do 1.e., reduced 1.e., red	/E) DRIVING for ration oil devices EM steering attached to teering wheel diameter) ring controls downs o seat belts, elocated cify): head rest wheel chair) o device
				(253) Parking brake handle (254) Foot controls including parking brake	CONFIDENCE LEVEL ( POINT (1) Certain (2) Probable (3) Possible (9) Unknown	DF CONTACT

			ANUAL RESTR					
NOTES:	Restraint systems should be as	sessed (	during the vehicle in	spection then co	ute for ded on	the varia	able may be found below. Supant Assessment Form.	
	If a Child safety seat is present, encode the data on the back of this page.							
	If the vehicle has automatic res	traints :	available, encode the	appropriate dat	a on th	ne back o	of the previous page.	
			Left	Cente			Right	
	Availability		4,	0			4	
F	Evidence of usage		04	00			04	
1	Used in this crash?		465	0			XES	
R S	Proper Use		1	0				
Ť	Failure Modes		1	2			1	
	Anchorage Adjustment			Ö			/	
	Availability					•		
	Evidence of usage					i -		
E	Used in this crash?							
о <b>х</b> оошо	Proper Use		· · · · · · · · · · · · · · · · · · ·					
N	Failure Modes							
D	Anchorage Adjustment							
-	Availability				**			
OT H E R	Evidence of usage							
	Used in this crash?							
	Proper Use	†						
	Failure Modes							
n	Anchorage Adjustment							
(0) ( (1) ( (2) :	None available Belt removed/destroyed Shoulder belt	Proper U (0) (1) (2)	se of Manual (Active) None used or not av Belt used properly Belt used properly w	ailable	houlder (0) (1)	No shou	or Anchorage Adjustment older belt <sub>er</sub> or anchorage adjustment for r belt	
	Lap belt Lap and shoulder belt		seat			Adjustal	ble shoulder Beit Upper	
	Belt available - type unknown		Used Improperly		400	Anchore		
Indoo	ral Beit Partially Destroyed	(3) (4)	Shoulder belt worn to Shoulder belt worn to		(2) (3)	In full up	p position osition	
(6)	Shoulder belt (lap belt	(-/	seat		(4)	In full de	own position	
(	destroyed/removed)	(5)	Belt worn around mo	ore than one	(5) (9)		unknown In if position has adjustable	
	Lap belt (shoulder belt destroyed/removed)	(6)	Lap belt worn on ab	domen	(0)		nchorage adjustment	
	Other belt (specify):	(7)	Lap belt or lap and s					
(9)	Unknown	(8)	used improperly with seat (specify):  Other improper use					
Manual	(Active) Belt System Use	•-•	system (specify):					
(00) (01)	None used, not available, or belt removed/destroyed Inoperable (specify):	(9)	Unknown					
(01)	Inoperable (apocity).					•		
(02) (03)	Shoulder belt Lap belt	Manual (	(Active) Belt Failure Mo	odes During				
(04)	Lap and shoulder belt	(0)	No manual belt used	or not available				
(05)	Belt used - type unknown	(1)	No manual belt failu					
(08)	Other belt used (specify):	(2)	Torn webbing (stret not included)	CHAN MARNING				
(12)	Shoulder belt used with child safety	(3)	Broken buckle or lat					
(13)	seat Lap belt used with child safety seat	(4) (5)	Upper anchorage se Other anchorage se					
		,-,						
(14)	Lap and shoulder belt used with		(specify):	<u></u>				
(14)	Lap and shoulder belt used with child safety seat	(6) (7)	(specify):	ve (specify):				
	Lap and shoulder belt used with child safety seat	(6) (7) (8)	(specify):					

Unknown

(9)

seat (specify):\_

Unknown if belt used

(99)

# **AUTOMATIC RESTRAINTS**

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

	<del></del>	· · · · · · · · · · · · · · · · · · ·		T
		Left Front	Right Front	Other
F	Availability/Function	1		
R	Deployment	1		
S	Failure	1		

# Air Bag System Availability/Function

- (0) Not equipped/not available
- (1) Air bag

### Non-functional

- (2) Air bag disconnected (specify):
- (3) Air bag not reinstalled
- (9) Unknown

### Are There Indications of Air Bag System Failure? (This Occupant Position)

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (9) Unknown

# Frontal Air Bag System Deployment

- (This Occupant Position)
- (0) Not equipped/not available
- Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, accident sequence undetermined
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

# Air Bag(s) Deployment, <u>Other</u> Than First Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

# **AUTOMATIC BELTS**

		Left	Right	
	Availability/Function			
F	Use			
R	Туре			
S   T	Proper Use			
	Failure Modes			

# Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts type unknown

### Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative)
- (3) Automatic belt use unknown
- (9) Unknown

# Automatic (Passive) Belt System Type

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

# Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

# Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

# Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- 6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):
- (9) Unknown

# FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data for the driver and first seat passenger in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
Type of air bag?		
Flaps open at tear points?	2	
Flaps damaged?	1	
Air bag damaged?	01	
Source of air bag damage	0 (	
Air bag tethered?	2	
Air bag have vent ports?	2	/
Other occupant contact air bag?		
Occupant wearing eyewear?	1	

# Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

# Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

# Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

# Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):
- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

### Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

# Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

# Did The Air Bag Have Vent Ports?

- (O) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

# Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

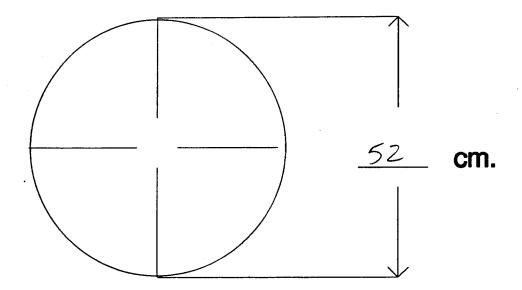
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Was This Occupant Wearing Eye-wear?

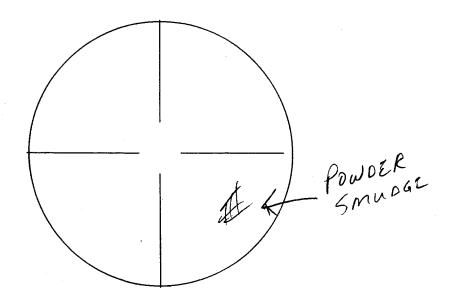
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

# DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

# 1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



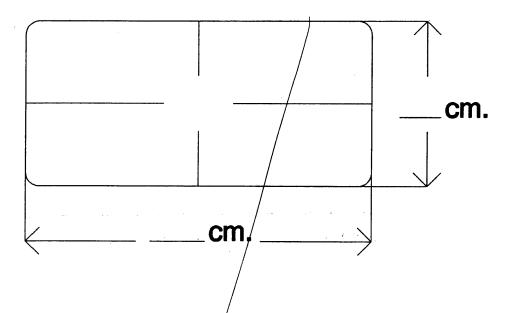
# 2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)



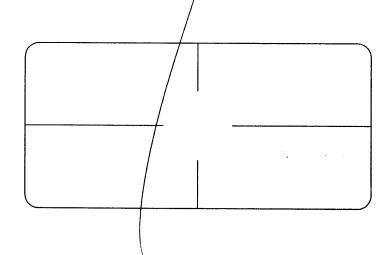
DRIVER AIR BAG S	KETCHES (Cont'd)
3. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE) a. Upper Flap b. Lower Flap width (Wu) 2/ width (WL) 2/ height (Hu) /3 height (HL) 4	
W <sub>1</sub>	
4. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE	5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS
•	•
6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS	
9 3 8 4 7 6 5	

# PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)



PASSENGER AIR BAG	G SKETCHES (Cont'd)
3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE) a. Flap width (W) height (H)  5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE	4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)  a. Upper Flap  width (W <sub>U</sub> )  height (H <sub>U</sub> )  H,  H,  H,  HO  HORTS  6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS
7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS  10 11 12 1 2 9 3 8 7 6 5 4	

Na	tional Accide	1					Vehicle Forn		Page 9
		"(	OTHER" A	R BAG DAI	MAGE AND	CONTAC	SKETCHES	5	
1.	SKETCH DAI	MAGE AND (	CONTACT E	VIDENCE ON	"OTHER" All	R BAG (Fron	t)		
				ř					
2.	SKETCH DAN	MAGE AND C	ONTACT E	VIDENCE ON	"OTHER" All	R BAG (Baci	<b>(</b> )	6.	
					•				
							·		
							,		
					•				

	"OTHER" AIR BAG SI	KETCHES (Cont'd	
3. SKETCH AIR BAG MODULE FLAF	P AND SIZE OR OPENING	FOR AIRBAG	
4. SKETCH AIR BAG VENT PORTS			
			•

# HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
	Head Restraint Type/Damage	1	0	1
_	Seat Type	01	00	01
F	Seat Performance		0	
R	Seat Orientation	l	0	1
T	Seat Track Position	5	0	5
	Seat Back Incline Pre/Post Impact	23		-23
	Head Restraint Type/Damage			
•	Seat Type			
S E C	Seat Performance			
0	Seat Orientation			<b>/</b>
N D	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
	Head Restraint Type/Damage			
т	Seat Type			
Н	Seat Performance			
R	Seat Orientation			
D	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
	Head Restraint Type/Damage			
Ō	Seat Type			
H -	Seat Performance			
E R	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

# HEAD RESTRAINTS/SEAT EVALUATION

# Head Restraint Type/Damage by Occupant at This Occupant Position Position)

- (0) No head restraints
- (1) Integral no damage(2) Integral damaged during accident.
- (3) Adjustable no damage(4) Adjustable damaged during accident
- Add-on no damage
- (6) Add-on damaged during accident
- (8) Other Specify):
- (9) Unknown

# Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03)Bench
- (04)Bench with separate back cushions
- (05)Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify):
- (10) Box mounted seat (i.e., van type) (99) Unknown

# Seat Performance (this Occupant

- (0) Occupant not seated or no seat
- No seat performance failure(s)
- 121 Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify):
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):
- (7) Combination of above (specify):
- (8) Other (specify):
- (9) Unknown

### Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):
- (9) Unknown

# Seat Track Adjusted Position Prior To **Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

# Adjustable Seat Track

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

### Seat Back Incline Prior and Post **Impact**

- (OO) Occupant not seated or no seat
- (01) Not adjustable

# Upright prior to impact

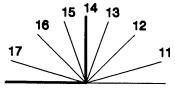
- (11) Moved to completely rearward position
- (12)Moved to rearward midrange position
- Moved to slightly rearward (13)position
- (14)Retained pre-impact position
- Moved to slightly forward (15)position
- Moved to forward midrange (16)position
- (17)Moved to completely forward position

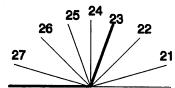
# Slightly reclined prior to impact

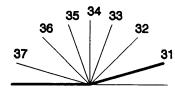
- (21) Moved to completely rearward position
- (22)Moved to rearward midrange position
- (23)Retained pre-impact postion
- Moved to upright position (24)
- (25)Moved to slightly forward position
- Moved to forward midrange (26) position
- (27)Moved to completely forward position

# Completely reclined prior to impact

- Retained pre-impact position (31)
- Moved to rearward midrange (32) position
- (33)Moved to slightly rearward position
- Moved to upright position
- (35)Moved to slightly forward position
- (36) Moved to forward midrange position
- (37)Moved to completely forward position
- (99) Unknown







Coding diagrams for Seat Back Incline Position Prior and Post Impact

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

` <u>.</u>					
HILD SAFETY S	EAT FIE	LD ASSES	SMENT		
	Specify B	elow for Eac	ch Child Safe	ety Seat	
ty seat (specify):  y seat type ety seat used tion  for  pecify):  ing for This  pecify):	5.	Child Safet Note: Optic (OO) No ch  Not Design (O1) After added (O2) After (O3) Child harne (O9) Unknown (11) Harne (12) Harne (19) Unknown (21) Harne (22) Harne (29) Unknown (99) Unknown Child Safet	cy Seat Tethons Below Anild safety seed with Harmarket harmarket harmarket harmarket harmarket harmarket harmarket harmarket harmarket harmarket harmarket own if harmarket bess/shield/tee	er Usage Are Used for V eat rness/Shield/T ness/shield/ten ness/shield/ten used, but no ther added ess/shield/teth s/Shield/Tethe ther not used ther used ess/shield/teth With Harness/ ther not used ther used ess/shield/teth safety seat u e/Model	ether ther ther used after market ner er her used /Shield/Tether ner used
	esent enter the occup	sesent enter the occupant's number the codes listed below. Comparison of the codes listed below. Comparison of the codes listed below. Comparison of the codes listed below. Specify But 4.  5.  Specify But 4.  5.  Specify But 4.  5.  Specify But 4.  5.  Specify But 4.  5.  Specify But 4.  5.  Specify But 4.  Specify B	Specify Below for Each to the codes listed below. Complete a column to the codes listed below. Complete a colum	Specify Below for Each Child Safet  4. Child Safety Seat Shie  5. Child Safety Seat Teth Note: Options Below A  (00) No child safety s  ty seat (specify):  7 seat type 10 sty seat used 11 After market harn 22 After market harn 23 Child safety seat 16 (09) Unknown if harn 26 (11) Harness/shield/te 27 seat (12) Harness/shield/te 28 (12) Harness/shield/te 29 Unknown if harn 29 (19) Unknown if harn 20 (21) Harness/shield/te 21 Harness/shield/te 22 Harness/shield/te 23 Harness/shield/te 29 Unknown if harn 29 Unknown if child 30 (20) Unknown if child 31 (21) Harness/shield/te 32 (22) Harness/shield/te 33 (23) Harness/shield/te 34 (29) Unknown if child 35 (29) Unknown if child 36 (29) Unknown if child 37 (29) Unknown if child 38 (29) Unknown if child 39 (29) Unknown if child 30 (20) Unknown if child 30 (21) Harness/shield/te 31 (22) Harness/shield/te 32 (23) Harness/shield/te 33 (24) Harness/shield/te 34 (25) Harness/shield/te 35 (26) Unknown if child 36 (26) Unknown if child 37 (27) Unknown if child 38 (28) Unknown if child 39 (29) Unknown if child 30 (21) Harness/shield/te 31 (21) Harness/shield/te 32 (22) Harness/shield/te 33 (23) Unknown if child 34 (25) Unknown if child 35 (26) Unknown if child 36 (27) Harness/shield/te 37 (27) Harness/shield/te 38 (28) Unknown if child 38 (29) Unknown if child 39 (20) Unknown if child 30 (21) Harness/shield/te 30 (22) Harness/shield/te 31 (23) Harness/shield/te 32 (23) Harness/shield/te 32 (24) Harness/shield/te 32 (25) Harness/shield/te 32 (26) Unknown if child 38 (27) Harness/shield/te	Specify Below for Each Child Safety Seat  4. Child Safety Seat Shield Usage  5. Child Safety Seat Tether Usage Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used for Note: Options Below Are Used (02) After market harness/shield/tet added, not used (03) Child safety seat used, but no harness/shield/tether added or used (04) Unknown if harness/shield/tether added or used (05) Unknown if harness/shield/tether used (19) Unknown if harness/shield/tether used (19) Unknown if harness/shield/tether used (29) Unknown if harness/shield/tether used (29) Unknown if harness/shield/tether used (29) Unknown if harness/shield/tether used (29) Unknown if harness/shield/tether used (29) Unknown if child safety seat used (29) Unknown if child safety seat used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child safety seat Used (29) Unknown if child

(29) Unknown orientation

(99) Unknown if child safety seat used3. Child Safety Seat Harness Usage

	EJECTION/I	ENTRAPI	MENT DA	TA		
Complete the following if the researcher has any indication that an occupant was either ejected from or entrappe in the vehicle. Code the appropriate data on the Occupant Assessment Form.						
EJECTION No [ ] Yes [ Describe indications of ejection and		volved in pa	artial ejection	n(s):		
			-			
Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium	/					
Medium Status						
Ejection (1) Complete ejection (2) Partial ejection (3) Ejection, Unknown degree (9) Unknown  Ejection Area (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear	(7) Roof (8) Other area (e.g., back of pickup, etc.) (specify):  (9) Unknown  Ejection Medium (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify):  (5) Integral structure (8) Other medium (specify):  (9) Unknown  Medium Status (Immediately Prior to Impact) (1) Open (2) Closed (3) Integral structure (9) Unknown					
ENTRAPMENT No [ ] Yes  Describe entrapment mechanism:	• •					
Component(s):		P4				
(Note in vehicle interior diagram)		·				



U.S. Department of Transportation

# **OCCUPANT ASSESSMENT FORM**

Form Approved 0.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

National Highway Traffic Safety

1/9	OCCUPANT'S SEATING
1. Primary Sampling Unit Number	10. Occupant's Seat Position
2. Case Number - Stratum / 2 O A	Front Seat
3. Vehicle Number <u>O 2</u>	(11) Left side (12) Middle
4. Occupant Number	(13) Right side
OCCUPANT'S CHARACTERISTICS	(14) Other (specify):(15) On or in the lap of another occupant
5. Occupant's Age  Code actual age at time of accident.  (OO) Less than one year old (specify by month):  (97) 97 years and older  (99) Unknown	Second Seat (21) Left side (22) Middle (23) Right side (24) Other (specify): (25) On or in the lap of another occupant
6. Occupant's Sex (1) Male (2) Female-not reported pregnant (3) Female-pregnant-1st trimester(1st-3rd month) (4) Female-pregnant-2nd trimester(4th-6th month) (5) Female-pregnant-3rd trimester(7th-9th month) (6) Female-pregnant-term unknown (9) Unknown	Third Seat (31) Left side (32) Middle (33) Right side (34) Other (specify): (35) On or in the lap of another occupant  Fourth Seat (41) Left side (42) Middle (43) Right side (44) Other (specify):
7. Occupant's Height Code actual height to the nearest centimeter. (999) Unknown  7 0 inches X 2.54 = 177.8 centimeters	(45) On or in the lap of another occupant  (97) In or on unenclosed area  (98) Other seat (specify):  (99) Unknown
8. Occupant's Weight Code actual weight to the nearest kilogram. (999)Unknown  180 pounds X .4536 = 816 kilograms  9. Occupant's Role (1) Driver (2) Passenger (9) Unknown	11. Occupant's Posture (0) Normal posture  Abnormal posture (1) Kneeling or standing on seat (2) Lying on or across seat (3) Kneeling, standing or sitting in front of seat (4) Sitting sideways or turned to talk with another occupant or to look out a rear window (5) Sitting on a console (6) Lying back in a reclined seat position (7) Bracing with feet or hands on a surface in front of seat (8) Other abnormal posture (specify): (9) Unknown

	EJECT	TION/EN	NTRAPMENT
	Ejection (0) No ejection (1) Complete ejection (2) Partial ejection (3) Ejection, unknown degree (9) Unknown	) P	15. Medium Status (Immediately Prior To Impact)  (0) No ejection (1) Open (2) Closed (3) Integral structure (9) Unknown
13.	Ejection Area (0) No ejection (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear (7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): (9) Unknown	<u>U</u>	(0) Not entrapped/exit not inhibited (1) Entrapped/pinned - mechanically restrained (2) Could not exit vehicle due to jammed doors, fire, etc. (specify):
14.	Ejection Medium  (0) No ejection  (1) Door/hatch/tailgate  (2) Nonfixed roof structure  (3) Fixed glazing  (4) Nonfixed glazing (specify):  (5) Integral structure  (8) Other medium (specify):	2	<ul> <li>(2) Removed from vehicle due to injuries</li> <li>(3) Exited vehicle with some assistance</li> <li>(4) Exited vehicle under own power</li> <li>(5) Occupant fully ejected</li> <li>(9) Unknown</li> </ul>
	(9) Unknown		

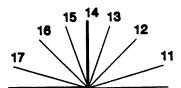
BELT SYSTEM FUNCTION					
18. Manual (Active) Belt System Availability (0) None available (1) Belt removed/destroyed (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt available—type unknown  Integral Belt Partially Destroyed (6) Shoulder belt (lap belt destroyed/removed)	22. Shoulder Belt Upper Anchorage Adjustment (0) No shoulder belt (1) No upper anchorage adjustment for shoulder belt  Adjustable shoulder Belt Upper Anchorage (2) In full up position (3) In mid position (4) In full down position (5) Position unknown (9) Unknown if position has adjustable upper anchorage adjustment				
(7) Lap belt (shoulder belt destroyed/removed) (8) Other belt (specify):  (9) Unknown  19. Manual (Active) Belt System Use (00) None used, not available, or belt removed/destroyed (01) Inoperative (specify):	23. Automatic (Passive) Belt System Availability/ Function (0) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown				
(02) Shoulder belt (03) Lap belt (04) Lap and shoulder belt (05) Belt used—type unknown (08) Other belt used (specify): (12) Shoulder belt used with child safety seat	(4) Automatic belts destroyed or rendered inoperative (9) Unknown  24. Automatic (Passive) Belt System Use (0) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually				
<ul> <li>(13) Lap belt used with child safety seat</li> <li>(14) Lap and shoulder belt used with child safety seat</li> <li>(15) Belt used with child safety seat—type unknown</li> <li>(18) Other belt used with child safety seat</li> <li>(specify):</li> <li>(99) Unknown if belt used</li> </ul>	disconnected, motorized track inoperative) (specify): (3) Automatic belt use unknown (9) Unknown  25. Automatic (Passive) Belt System Type (0) Not equipped/not available (1) Non-motorized system				
20. Proper Use of Manual (Active) Belts (0) None used or not available (1) Belt used properly (2) Belt used properly with child safety seat  **Belt Used Improperly** (3) Shoulder belt worn under arm (4) Shoulder belt worn behind back or seat (5) Belt worn around more than one person (6) Lap belt worn on abdomen (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):  (8) Other improper use of manual belt system (specify):	(2) Motorized system (9) Unknown  26. Proper Use of Automatic (Passive) Belt System (0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat  Automatic Belt Used Improperly (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with shild sefety sout (passify):				
21. Manual (Active) Belt Failure Modes During Accident (0) No manual belt used or not available (1) No manual belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): (6) Broken retractor (7) Combination of above (specify): (8) Other manual belt failure (specify):	with child safety seat (specify):  (8) Other improper use of automatic belt system (specify): (9) Unknown  27. Automatic (Passive) Belt Failure Modes During Accident (0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): (6) Broken retractor (7) Combination of above (specify): (8) Other automatic belt failure (specify):				

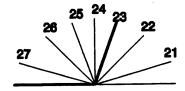
POLICE REPORTED RESTRAINT USE	AIR BAG SYSTEM FUNCTION
28. Police Reported Belt Use  (0) None used (1) Police did not indicate belt use (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt used, type not specified (6) Child safety seat (7) Automatic belt (8) Other type belt, (specify):	30. Frontal Air Bag System Availability/Function (This Occupant Position) (0) Not equipped/not available (1) Air bag  Non-functional (2) Air bag disconnected (specify):  (3) Air bag not reinstalled (9) Unknown
(9) Police indicated "unknown"  29. Police Reported Air Bag Availability/Function (0) No air bag available (1) Police did not indicate air bag availability/function (2) Deployed (3) Not deployed (4) Unknown if deployed (9) Police indicated "unknown"	31. Frontal Air Bag System Deployment (This Occupant Position) (0) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown
Check the Primary Source Used In Determining Belt Use.  [ ] Not equipped/not available/destroyed or rendered inoperative  / [ / Vehicle inspection [ ] Official injury data 2 [ / Driver/occupant interview [ ] Other (specify):  [ ] Unknown if belt used	32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) (0) Not equipped/not available (1) Air bag  Non-functional (2) Air bag disconnected (specify):  (3) Air bag not reinstalled (9) Unknown Specify type of "other" air bag present:
	33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) (0) Not equipped with an "other" air bag (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown
	Failure? (This Occupant Position) (0) Not equipped/not available (1) No (2) Yes (specify):

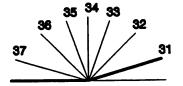
FIRS	ST SEAT FRONTAL AIR E	BAG SYSTEM EVALUATION
35. Had Vehicle Been in Previous (0) Not equipped/not avail (1) No previous accidents  Yes (2) Previous accident(s) we (3) One previous accident (4) More than one previous one deployment (8) Previous accidents, un status (9) Unknown	vithout deployment(s) with deployment us accident with at least	40. Longitudinal Component of Delta V For Air Bag Deployment Impact (_000) Not equipped/not available Code the value of the delta V for the impact that initiated the air bag deployment (_996) Deployment, unknown longitudinal Delta V (_997) Not deployed (_998) Unknown if deployed (_999) Unknown
36. Type of Air Bag (0) Not equipped/not avai (1) Original manufacturer (2) Retrofitted air bag (3) Replacement air bag (8) Unknown type of air t	installed system	41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? (0) Not equipped/not available (1) No (2) Yes (3) Deployed, unknown if flap(s) opened at designated tear points (7) Not deployed (8) Unknown if deployed
37. Had Any Prior Maintenand Been Performed On This (O) Not equipped/not ava (1) No prior maintenance (2) Yes, prior maintenance (9) Unknown	Air Bag System? ilable	(9) Unknown  42. Were Air Bag Module Cover Flap(s) Damaged?  (0) Not equipped/not available  (1) No  (2) Yes (specify):  (3) Deployed, unknown if air bag module cover flap(s) damaged
number that in deployment (96) Deployed, unknowr (97) Not deployed	vailable ent event sequence itiated the air bag	(7) Not deployed (8) Unknown if deployed (9) Unknown  43. Was There Damage To The Air Bag? (00) Not equipped/not available (01) Not damaged  Yes - Air Bag Damage
(98) Unknown if deployed (99) Unknown  39. CDC For Air Bag Deployr (0) Not equipped/not available (1) Highest delta V (2) Second highest delta (3) Other non-coded delta (6) Deployed, unknown (7) Not deployed (8) Unknown if deployed (9) Unknown	nent Impact illable  V a V (specify):	(02) Ruptured (03) Cut (04) Torn (05) Holed (06) Burned (07) Abraded (88) Other damage (specify):  (95) Damaged, details unknown (96) Deployed, unknown if damaged (97) Not deployed (98) Unknown if deployed (99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM	HEAD RESTRAINT AND SEAT EVALUATION
44. Source of Air Bag Damage (00) Not equipped/not available (01) Not damaged (02) Object worn by occupant, (specify):  (03) Object carried by occupant, (specify):  (04) Adaptive/assistive controls, (specify):  (05) Fire in vehicle (06) Thermal burns (07) Rescue or emergency efforts (88) Other damage source (specify):  (95) Damaged, unknown source (96) Deployed, unknown if damaged (97) Not deployed (98) Unknown  (99) Unknown	49. Head Restraint Type/Damage by Occupant at This Occupant Position (0) No head restraints (1) Integral—no damage (2) Integral—damaged during accident (3) Adjustable—no damage (4) Adjustable—damaged during accident (5) Add-on—no damage (6) Add-on—damaged during accident (8) Other (specify):  (9) Unknown  50. Seat Type (this Occupant Position) (00) Occupant not seated or no seat (01) Bucket (02) Bucket with folding back (03) Bench (04) Bench with separate back cushions (05) Bench with folding back(s) (06) Split bench with folding back(s)
45. Was The Air Bag Tethered? (0) Not equipped/not available (1) No (2) Yes (specify number of tether straps):  (3) Deployed, unknown if tethered (7) Not deployed (8) Unknown if deployed (9) Unknown  46. Did The Air Bag Have Vent Ports? (0) Not equipped/not available (1) No	(08) Pedestal (i.e., column supported) (09) Box mounted seat (i.e., van type) (10) Other seat type (specify):  (99) Unknown  51. Seat Orientation (this Occupant Position) (0) Occupant not seated or no seat (1) Forward facing seat (2) Rear facing seat (3) Side facing seat (inward)
(2) Yes (specify number of vent ports):  (3) Deployed, unknown if vent ports present (7) Not deployed (8) Unknown if deployed (9) Unknown  47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? (0) Not equipped/not available (1) No (2) Yes (specify):  (3) Deployed, unknown if other occupant contact to air bag	(4) Side facing seat (outward) (8) Other (specify):  (9) Unknown  52. Seat Track Adjusted Position Prior To Impact (0) Occupant not seated or no seat (1) Non-adjustable seat track  Adjustable Seat Track (2) Seat at forward most track position (3) Seat between forward most and middle track positions (4) Seat at middle track position (5) Seat between middle and rear most track positions (6) Seat at rear most track position
(7) Not deployed (8) Unknown if deployed (9) Unknown  48. Was This Occupant Wearing Eye-wear? (0) Not equipped/not available (1) No (2) Eyeglasses/sunglasses (3) Contact lenses (4) Deployed, unknown if eyewear worn (7) Not deployed (8) Unknown if deployed (9) Unknown	(6) Seat at rear most track position (9) Unknown

	HEAD RESTRAINT AND SEA	AT EVALUATION continued
53.	Seat Back Incline Prior and Post Impact 23 (00) Occupant not seated or no seat (01) Not adjustable	
	Upright prior to impact (11) Moved to completely rearward position (12) Moved to rearward midrange position (13) Moved to slightly rearward position (14) Retained pre-impact position (15) Moved to slightly forward position (16) Moved to forward midrange position (17) Moved to completely forward position	15 14
	Slightly reclined prior to impact (21) Moved to completely rearward position (22) Moved to rearward midrange position (23) Retained pre-impact position (24) Moved to upright position (25) Moved to slightly forward position (26) Moved to forward midrange position (27) Moved to completely forward position	25 <sup>24</sup> 26 27
	Completely reclined prior to impact (31) Retained pre-impact position (32) Moved to rearward midrange position (33) Moved to slightly rearward position (34) Moved to upright position (35) Moved to slightly forward position (36) Moved to forward midrange position (37) Moved to completely forward position	35 34 36 37
	(99) Unknown	
54	. Seat Performance (this Occupant Position)  (0) Occupant not seated or no seat  (1) No seat performance failure(s)  (2) Seat adjusters failed  (3) Seat back folding locks or "seat back" failed  (specify):	
	(4) Seat track/anchors failed	
	<ul><li>(5) Deformed by impact of occupant</li><li>(6) Deformed by passenger compartment intrusion, (specify):</li></ul>	
	(7) Combination of above (specify):	
1	(8) Other (specify):	
	(9) Unknown	







	CHILD SAF	ETY SEAT
55.	Child Safety Seat Make/Model  (000) No child safety seat  Applicable codes are found in your NASS CDS  Data Collection, Coding and Editing	58. Child Safety Seat Harness Usage  59. Child Safety Seat Shield Usage
	(950) Built-in child safety seat (997) Other make/model (specify):	60. Child Safety Seat Tether Usage
56.	(998) Unknown make/model (999) Unknown if child safety seat used  Type of Child Safety Seat	Note: Options below applicable to Variables OA58-OA60. (OO) No child safety seat
00.	(0) No child safety seat (1) Infant seat (2) Toddler seat (3) Convertible seat (4) Booster seat - with shield	Not Designed With Harness/Shield/Tether  (O1) After market harness/shield/tether added, not used  (O2) After market harness/shield/tether used  (O3) Child safety seat used, but no after market
	<ul><li>(5) Booster seat - without shield</li><li>(7) Other type child safety seat (specify):</li><li>(8) Unknown child safety seat type</li></ul>	harness/shield/tether added (09) Unknown if harness/shield/tether added or used
57.	(9) Unknown if child safety seat used  Child Safety Seat Orientation (00) No child safety seat	Designed With Harness/Shield/Tether (11) Harness/shield/tether not used (12) Harness/shield/tether used (19) Unknown if harness/shield/tether used
	Designed for Rear Facing for This Age/Weight (01) Rear facing (02) Forward facing (08) Other orientation (specify):	Unknown If Designed With Harness/Shield/Tether (21) Harness/shield/tether not used (22) Harness/shield/tether used (29) Unknown if harness/shield/tether used
	(09) Unknown orientation	(99) Unknown if child safety seat used
	Designed For Forward Facing for This Age/Weight (11) Rear facing (12) Forward facing (18) Other orientation (specify): (19) Unknown orientation  Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight (21) Rear facing (22) Forward facing (28) Other orientation (specify): (29) Unknown orientation (99) Unknown if child safety seat used	

INJURY CONSEQUENCES  61. Injury Severity (Police Rating)  (0) O - No injury (1) C - Possible injury (2) B - Nonincapacitating injury (3) A - Incapacitating injury (4) K - Killed (5) U - Injury, severity unknown	63. Type Of Medical Facility (for Initial Treatment)  (0) Not treated at a medical facility (1) Trauma center (2) Hospital (3) Medical clinic (4) Physician's office (5) Treatment later at medical facility (8) Other (specify):
(6) Died prior to accident (9) Unknown  62. Treatment - Mortality (0) No treatment (1) Fatal (2) Fatal - ruled disease (specify):	(9) Unknown  64. Hospital Stay (00) Not Hospitalized Code the number of days (up through 60) that the occupant stayed in hospital.
Nonfatal (3) Hospitalization (4) Transported and released (5) Treatment at scene - nontransported (6) Treatment later (7) Treatment - other (specify):	(61) 61 days or more (99) Unknown  65. Working Days Lost  Code the number of days (up through 60) that the occupant lost from work due to the accident (00) No working days lost
(8) Transported to a medical facility-unknown if treated (9) Unknown	(61) 61 days or more (62) Fatally injured (97) Not working prior to accident (99) Unknown

**VARIABLES 66-74** 

TO BE CODED BY THE ZONE CENTER

# TO BE CODED BY THE ZONE CENTER

INJURY CONSEQUENCES	TRAUMA DATA
Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, n days = 30 + n up through 30 days = 60)  (OO) Not fatal (96) Fatal - ruled disease (99) Unknown	71. Glasgow Coma Scale (GCS) Score (at Medical Facility) (00) Not injured (01) Injured - not treated at medical facility (02) No GCS Score at medical facility (03-15) Code the actual value of the initial GCS Score recorded at medical facility. (97) Injured, details unknown (99) Unknown if injured
67. 1st Medically Reported Cause of Death 0	72. Was the Occupant Given Blood?  (1) No - blood not given  (2) Yes - blood given
68. 2nd Medically Reported Cause of Death	(specify units):(9) Unknown if blood given
69. 3rd Medically Reported Cause of Death  Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  (00) Not fatal or no additional causes  (96) Mode of death given but specific injuries are not linked to cause of death. (specify):	73. Arterial Blood Gases (ABG) – HCO <sub>3</sub> (00) Not injured (01) Injured, ABGs not measured or reported (02-50) Code the actual value of the HCO <sub>3</sub> (96) ABGs reported, HCO <sub>3</sub> unknown (97) Injured, details unknown (99) Unknown if injured
(97) Other result (includes fatal ruled disease) (specify):	BELT USE DETERMINATION
70. Number of Recorded Injuries for This Occupant Code the actual number of	74. Primary Source of Belt Use Determination (0) Not equipped/not available/destroyed or rendered inoperative (1) Vehicle inspection (2) Official injury data
injuries recorded for this occupant. (00) No recorded injuries (97) Injured, details unknown (99) Unknown if injured	(2) Official injury data (3) Driver/occupant interview (8) Other (specify): (9) Unknown if belt used

PSU NUMBER
CASE NUMBER
VEHICLE NUMBER
OCCUPANT NUMBER

120A 02 01

# OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

ENTIRE	FORM

[] Page Number (s)



U.S. Department of Transportation

HS Form 433A (1/95)

# OCCUPANT ASSESSMENT FORM

Form Approved O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM National Highway Traffic Safety

dministration	OCCUPANT'S SEATING
1. Primary Sampling Unit Number	10. Occupant's Seat Position
2. Case Number - Stratum	Front Seat
3. Vehicle Number <u>0 2</u>	(11) Left side (12) Middle
Λ 2 I	(13) Right-side
4. Occupant Number	(14) Other (specify):
OCCUPANT'S CHARACTERISTICS	(15) On or in the lap of another occupant
5. Occupant's Age Code actual age at time of accident. (OO) Less than one year old (specify by month):  (97) 97 years and older (99) Unknown	Second Seat (21) Left side (22) Middle (23) Right side (24) Other (specify): (25) On or in the lap of another occupant
6. Occupant's Sex (1) Male (2) Female-not reported pregnant (3) Female-pregnant-1st trimester(1st-3rd month) (4) Female-pregnant-2nd trimester(4th-6th month) (5) Female-pregnant-3rd trimester(7th-9th month) (6) Female-pregnant-term unknown (9) Unknown	Third Seat (31) Left side (32) Middle (33) Right side (34) Other (specify): (35) On or in the lap of another occupant  Fourth Seat (41) Left side (42) Middle (43) Right side (44) Other (specify): (45) On or in the lap of another occupant
7. Occupant's Height Code actual height to the nearest centimeter. (999) Unknown  72 inches X 2.54 = 182.8 centimeters	(97) In or on unenclosed area (98) Other seat (specify): (99) Unknown
8. Occupant's Weight Code actual weight to the nearest kilogram. (999)Unknown    (999)Unknown   (1) Driver (2) Passenger (9) Unknown	11. Occupant's Posture (0) Normal posture  Abnormal posture (1) Kneeling or standing on seat (2) Lying on or across seat (3) Kneeling, standing or sitting in front of seat (4) Sitting sideways or turned to talk with another occupant or to look out a rear window (5) Sitting on a console (6) Lying back in a reclined seat position (7) Bracing with feet or hands on a surface in front of seat (8) Other abnormal posture (specify): (9) Unknown

	EJECTION/ENTRAPMENT			
12.	Ejection (0) No ejection (1) Complete ejection (2) Partial ejection (3) Ejection, unknown degree (9) Unknown	0	15. Medium Status (Immediately Prior To Impact)  (0) No ejection (1) Open (2) Closed (3) Integral structure (9) Unknown	
13.	Ejection Area (O) No ejection (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear (7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): (9) Unknown	<u>O</u>	16. Entrapment (0) Not entrapped/exit not inhibited (1) Entrapped/pinned - mechanically restrained (2) Could not exit vehicle due to jammed doors, fire, etc. (specify):	
14.	Ejection Medium  (0) No ejection  (1) Door/hatch/tailgate  (2) Nonfixed roof structure  (3) Fixed glazing  (4) Nonfixed glazing (specify):  (5) Integral structure  (8) Other medium (specify):	0	(2) Removed from vehicle due to injuries (3) Exited vehicle with some assistance (4) Exited vehicle under own power (5) Occupant fully ejected (9) Unknown	
	(9) Unknown			

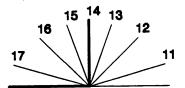
	BELT SYSTEM FUNCTION			
18.	Manual (Active) Belt System Availability  (0) None available (1) Belt removed/destroyed (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt available—type unknown  Integral Belt Partially Destroyed (6) Shoulder belt (lap belt destroyed/removed) (7) Lap belt (shoulder belt destroyed/removed) (8) Other belt (specify):	22. Shoulder Belt Upper Anchorage Adjustment (0) No shoulder belt (1) No upper anchorage adjustment for shoulder belt  Adjustable shoulder Belt Upper Anchorage (2) In full up position (3) In mid position (4) In full down position (5) Position unknown (9) Unknown if position has adjustable upper anchorage adjustment  23. Automatic (Passive) Belt System Availability/		
19.	Manual (Active) Belt System Use (00) None used, not available, or belt removed/destroyed (01) Inoperative (specify): (02) Shoulder belt (03) Lap belt (04) Lap and shoulder belt (05) Belt used—type unknown (08) Other belt used (specify): (12) Shoulder belt used with child safety seat (13) Lap belt used with child safety seat (14) Lap and shoulder belt used with child safety seat (15) Belt used with child safety seat—type unknown (18) Other belt used with child safety seat (specify):	Function (O) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown  Non-functional (4) Automatic belts destroyed or rendered inoperative (9) Unknown  24. Automatic (Passive) Belt System Use (O) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): (3) Automatic belt use unknown (9) Unknown		
20.	Proper Use of Manual (Active) Belts  (0) None used or not available  (1) Belt used properly (2) Belt used properly with child safety seat  Belt Used Improperly (3) Shoulder belt worn under arm (4) Shoulder belt worn behind back or seat (5) Belt worn around more than one person (6) Lap belt worn on abdomen (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):  (8) Other improper use of manual belt system (specify):	(0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown  26. Proper Use of Automatic (Passive) Belt System (0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat  Automatic Belt Used Improperly (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly		
21.	Manual (Active) Belt Failure Modes During Accident (0) No manual belt used or not available (1) No manual belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): (6) Broken retractor (7) Combination of above (specify): (8) Other manual belt failure (specify):	with child safety seat (specify):  (8) Other improper use of automatic belt system (specify): (9) Unknown  27. Automatic (Passive) Belt Failure Modes During Accident (0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify):  (6) Broken retractor (7) Combination of above (specify): (8) Other automatic belt failure (specify):		

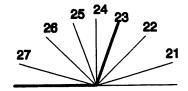
POLICE REPORTED RESTRAINT USE	AIR BAG SYSTEM FUNCTION
28. Police Reported Belt Use  (0) None used (1) Police did not indicate belt use (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt used, type not specified (6) Child safety seat. (7) Automatic belt (8) Other type belt, (specify):	30. Frontal Air Bag System Availability/Function (This Occupant Position) (0) Not equipped/not available (1) Air bag  Non-functional (2) Air bag disconnected (specify):  (3) Air bag not reinstalled (9) Unknown
(9) Police indicated "unknown"  29. Police Reported Air Bag Availability/Function (0) No air bag available (1) Police did not indicate air bag availability/function (2) Deployed (3) Not deployed (4) Unknown if deployed (9) Police indicated "unknown"	31. Frontal Air Bag System Deployment (This Occupant Position) (O) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown
Check the Primary Source Used In Determining Belt Use.  [ ] Not equipped/not available/destroyed or rendered inoperative	32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) (0) Not equipped/not available (1) Air bag  Non-functional (2) Air bag disconnected (specify):  (3) Air bag not reinstalled (9) Unknown Specify type of "other" air bag present:
	33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) (0) Not equipped with an "other" air bag (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown  34. Are There Indications of Air Bag System Failure? (This Occupant Position) (0) Not equipped/not available (1) No (2) Yes (specify):

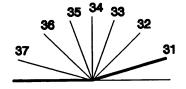
FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION			
35. Had Vehicle Been in Previous Accident(s)?  (0) Not equipped/not available (1) No previous accidents  Yes (2) Previous accident(s) without deployment(s) (3) One previous accident with deployment (4) More than one previous accident with at least one deployment (8) Previous accidents, unknown deployment status (9) Unknown	40. Longitudinal Component of Delta V For Air Bag Deployment Impact (_000) Not equipped/not available Code the value of the delta V for the impact that initiated the air bag deployment (_996) Deployment, unknown longitudinal Delta V (_997) Not deployed (_998) Unknown if deployed (_999) Unknown		
36. Type of Air Bag  (0) Not equipped/not available  (1) Original manufacturer installed system  (2) Retrofitted air bag  (3) Replacement air bag  (8) Unknown type of air bag  (9) Unknown	41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? (0) Not equipped/not available (1) No (2) Yes (3) Deployed, unknown if flap(s) opened at designated tear points (7) Not deployed (8) Unknown if deployed (9) Unknown		
37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? (0) Not equipped/not available (1) No prior maintenance (2) Yes, prior maintenance (specify): (9) Unknown	42. Were Air Bag Module Cover Flap(s) Damaged?  (0) Not equipped/not available  (1) No  (2) Yes (specify):  (3) Deployed, unknown if air bag module cover flap(s) damaged  (7) Not deployed		
38. Air Bag Deployment Accident Event Sequence Number (00) Not equipped/not available Code the accident event sequence number that initiated the air bag deployment (96) Deployed, unknown event (97) Not deployed (98) Unknown if deployed (99) Unknown	(8) Unknown if deployed (9) Unknown  43. Was There Damage To The Air Bag? (00) Not equipped/not available (01) Not damaged  Yes - Air Bag Damage (02) Ruptured (03) Cut		
39. CDC For Air Bag Deployment Impact (0) Not equipped/not available (1) Highest delta V (2) Second highest delta V (3) Other non-coded delta V (specify):  (6) Deployed, unknown event (7) Not deployed (8) Unknown if deployed (9) Unknown	(04) Torn (05) Holed (06) Burned (07) Abraded (88) Other damage (specify):  (95) Damaged, details unknown (96) Deployed, unknown if damaged (97) Not deployed (98) Unknown if deployed (99) Unknown		

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION continued	HEAD RESTRAINT AND SEAT EVALUATION
44. Source of Air Bag Damage (00) Not equipped/not available (01) Not damaged (02) Object worn by occupant, (specify):  (03) Object carried by occupant, (specify):  (04) Adaptive/assistive controls, (specify):  (05) Fire in vehicle (06) Thermal burns (07) Rescue or emergency efforts (88) Other damage source (specify):  (95) Damaged, unknown source (96) Deployed, unknown if damaged (97) Not deployed (98) Unknown (99) Unknown	49. Head Restraint Type/Damage by Occupant at This Occupant Position (0) No head restraints (1) Integral—no damage (2) Integral—damaged during accident (3) Adjustable—no damage (4) Adjustable—damaged during accident (5) Add-on—no damage (6) Add-on—damaged during accident (8) Other (specify):  (9) Unknown  50. Seat Type (this Occupant Position) (00) Occupant not seated or no seat (01) Bucket (02) Bucket with folding back (03) Bench (04) Bench with separate back cushions (05) Bench with folding back(s) (06) Split bench with folding back(s)
45. Was The Air Bag Tethered? (0) Not equipped/not available (1) No (2) Yes (specify number of tether straps):  (3) Deployed, unknown if tethered (7) Not deployed (8) Unknown if deployed (9) Unknown  46. Did The Air Bag Have Vent Ports? (0) Not equipped/not available (1) No (2) Yes (specify number of vent ports):	(07) Split bench with folding back(s) (08) Pedestal (i.e., column supported) (09) Box mounted seat (i.e., van type) (10) Other seat type (specify):  (99) Unknown  51. Seat Orientation (this Occupant Position) (0) Occupant not seated or no seat (1) Forward facing seat (2) Rear facing seat (3) Side facing seat (inward) (4) Side facing seat (outward) (8) Other (specify):
(3) Deployed, unknown if vent ports present (7) Not deployed (8) Unknown if deployed (9) Unknown  47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? (0) Not equipped/not available (1) No (2) Yes (specify):  (3) Deployed, unknown if other occupant contact to air bag (7) Not deployed (8) Unknown if deployed (9) Unknown	(9) Unknown  52. Seat Track Adjusted Position Prior To Impact (0) Occupant not seated or no seat (1) Non-adjustable seat track  Adjustable Seat Track (2) Seat at forward most track position (3) Seat between forward most and middle track positions (4) Seat at middle track position (5) Seat between middle and rear most track positions (6) Seat at rear most track position (9) Unknown
48. Was This Occupant Wearing Eye-wear?  (0) Not equipped/not available  (1) No  (2) Eyeglasses/sunglasses  (3) Contact lenses  (4) Deployed, unknown if eyewear worn  (7) Not deployed  (8) Unknown if deployed  (9) Unknown	

	HEAD RESTRAINT AND SEA	AT EVALUATION continued
53.	Seat Back Incline Prior and Post Impact 23 (00) Occupant not seated or no seat (01) Not adjustable	
	Upright prior to impact (11) Moved to completely rearward position (12) Moved to rearward midrange position (13) Moved to slightly rearward position (14) Retained pre-impact position (15) Moved to slightly forward position (16) Moved to forward midrange position (17) Moved to completely forward position	15 14
	Slightly reclined prior to impact (21) Moved to completely rearward position (22) Moved to rearward midrange position (23) Retained pre-impact position (24) Moved to upright position (25) Moved to slightly forward position (26) Moved to forward midrange position (27) Moved to completely forward position	25 24 26 27
	Completely reclined prior to impact (31) Retained pre-impact position (32) Moved to rearward midrange position (33) Moved to slightly rearward position (34) Moved to upright position (35) Moved to slightly forward position (36) Moved to forward midrange position (37) Moved to completely forward position	35 34 36 37
	(99) Unknown	
54	. Seat Performance (this Occupant Position) (0) Occupant not seated or no seat (1) No seat performance failure(s) (2) Seat adjusters failed (3) Seat back folding locks or "seat back" failed (specify): (4) Seat track/anchors failed (5) Deformed by impact of occupant (6) Deformed by passenger compartment intrusion, (specify):	
	(7) Combination of above (specify):	
	(8) Other (specify):(9) Unknown	







	CHILD SAF	ETY	SEAT
55.	Child Safety Seat Make/Model (000) No child safety seat Applicable codes are found in your NASS CDS	58.	Child Safety Seat Harness Usage
	Data Collection, Coding and Editing (950) Built-in child safety seat (997) Other make/model (specify):		Child Safety Seat Tether Usage
	(998) Unknown make/model	60.	Child Safety Seat Tether Usage
	(999) Unknown if child safety seat used		Note: Options below applicable to Variables OA58-OA60. (00) No child safety seat
56.	Type of Child Safety Seat		
	(0) No child safety seat (1) Infant seat		Not Designed With Harness/Shield/Tether (01) After market harness/shield/tether added, not used
	<ul><li>(2) Toddler seat</li><li>(3) Convertible seat</li></ul>		(02) After market harness/shield/tether used
	(4) Booster seat - with shield		(03) Child safety seat used, but no after market
	(5) Booster seat - without shield		harness/shield/tether added
	(7) Other type child safety seat (specify):		(09) Unknown if harness/shield/tether added or used
	(8) Unknown child safety seat type (9) Unknown if child safety seat used		Designed With Harness/Shield/Tether
	(9) Ohkilowh ii Cillio Salety Seat useu		(11) Harness/shield/tether not used
			(12) Harness/shield/tether used
57.	Child Safety Seat Orientation		(19) Unknown if harness/shield/tether used
	(00) No child safety seat		W. D. Communication of China Control of
	B. J. J. C. B. D. Frains for This AssAllainha	1	Unknown If Designed With Harness/Shield/Tether (21) Harness/shield/tether not used
	Designed for Rear Facing for This Age/Weight	ļ	(22) Harness/shield/tether used
	(01) Rear facing (02) Forward facing		(29) Unknown if harness/shield/tether used
	(08) Other orientation (specify):		
	(ob) Cities chantalism (opening).		(99) Unknown if child safety seat used
	(09) Unknown orientation		
	Designed For Forward Facing for This Age/Weight		
	(11) Rear facing		
ļ	(12) Forward facing		
	(18) Other orientation (specify):		·
	(19) Unknown orientation		
ĺ	Unknown Design or Orientation For This		
	Age/Weight, or Unknown Age/Weight	1	
İ	(21) Rear facing	1	
	(22) Forward facing	1	
	(28) Other orientation (specify):	1	
	(29) Unknown orientation		
	(99) Unknown if child safety seat used		
1		1	

	INJURY CONSEQUENCES		
61.	Injury Severity (Police Rating)	63.	Type Of Medical Facility (for Initial Treatment)  (0) Not treated at a medical facility
İ	(0) O - No injury (1) C - Possible injury		(1) Trauma center
	(2) B - Nonincapacitating injury	l	(2) Hospital (3) Medical clinic
	(3) A - Incapacitating injury	l	(4) Physician's office
	(4) K - Killed (5) U - Injury, severity unknown		(5) Treatment later at medical facility
	(6) Died prior to accident		(8) Other (specify):
	(9) Unknown		(9) Unknown
62	Treatment - Mortality ${\cal O}$		
<b>U</b> L.	(O) No treatment	64.	Hospital Stay
	(1) Fatal		(00) Not Hospitalized  Code the number of days (up through 60)
	(2) Fatal - ruled disease (specify):		that the occupant stayed in hospital.
		İ	(61) 61 days or more
	Nonfatal	İ	(99) Unknown
	(3) Hospitalization	65.	Working Days Lost
	(4) Transported and released (5) Treatment at scene - nontransported		Code the number of days
	(6) Treatment later		(up through 60) that the occupant
	(7) Treatment - other (specify):	ŀ	lost from work due to the accident (00) No working days lost
	(8) Transported to a medical facility-unknown if		(61) 61 days or more
	treated		(62) Fatally injured
	(9) Unknown		(97) Not working prior to accident (99) Unknown
			(33) CHKHUWII
	STOP WO	<b>PK</b>	HERE

**VARIABLES 66-74** 

TO BE CODED BY THE ZONE CENTER

# TO BE CODED BY THE ZONE CENTER

	· .
INJURY CONSEQUENCES	TRAUMA DATA
Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, n days = 30 + n up through 30 days = 60)  (OO) Not fatal  (96) Fatal - ruled disease  (99) Unknown	71. Glasgow Coma Scale (GCS) Score (at Medical Facility) (00) Not injured (01) Injured - not treated at medical facility (02) No GCS Score at medical facility (03-15) Code the actual value of the initial GCS Score recorded at medical facility. (97) Injured, details unknown (99) Unknown if injured
67. 1st Medically Reported Cause of Death  68. 2nd Medically Reported Cause of Death  69. 3rd Medically Reported Cause of Death  Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  (00) Not fatal or no additional causes  (96) Mode of death given but specific injuries are not linked to cause of death. (specify):	72. Was the Occupant Given Blood?  (1) No - blood not given (2) Yes - blood given (specify units):  (9) Unknown if blood given  73. Arterial Blood Gases (ABG) – HCO <sub>3</sub> (00) Not injured (01) Injured, ABGs not measured or reported (02-50) Code the actual value of the HCO <sub>3</sub> (96) ABGs reported, HCO <sub>3</sub> unknown (97) Injured, details unknown (99) Unknown if injured
(97) Other result (includes fatal ruled	
disease) (specify):	BELT USE DETERMINATION
70. Number of Recorded Injuries for This Occupant Code the actual number of injuries recorded for this occupant. (00) No recorded injuries (97) Injured, details unknown (99) Unknown if injured	74. Primary Source of Belt Use Determination (0) Not equipped/not available/destroyed or rendered inoperative (1) Vehicle inspection (2) Official injury data (3) Driver/occupant interview (8) Other (specify):

PSU NUMBER
CASE NUMBER
VEHICLE NUMBER
OCCUPANT NUMBER

120A 120A 120A

# OCCUPANT INJURY FORM

THE	FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:
	ENTIRE FORM
rı	Dies Number (e)

National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

	mai Procedure Campling Cystem-Crashworthiness Dat	a dystein. General Venicle Form	Page 2
	PRECRASH ENVIRONMENTAL DATA	25. Roadway Surface Condition	
19.	Relation To Interchange Or Junction 2	(1) Dry	
	(0) Non-interchange area and non-junction	(2) Wet	
İ	(1) Interchange area related	(3) Snow or slush	
	(1) more and angle and a rotated	(4) Ice	
	Non-Interchange junctions	(5) Sand, dirt, or oil	
	(2) Intersection related	(8) Other (specify):	
	(3) Driveway, alley access related	(9) Unknown	
	(4) Other junction (specify)	(0) 0	
	(4) Other junction (specify)		1
ļ	(5) Unknown type of junction	26. Light Conditions	
	(3) Onknown type of junction	(1) Daylight	
	(9) Unknown	(2) Dark	
	(3) Olikilowii	(3) Dark, but lighted	
		(4) Dawn	
20	Trafficway Flow	_(5) Dusk	
20.		(9) Unknown	
	(0) Not physically divided (two way traffic)		
	(1) Divided trafficway-median strip without		_
:	positive barrier	27. Atmospheric Conditions	0
	(2) Divided trafficway-median strip with positive	(0) No adverse atmospheric-related driving	
	barrier	conditions	
	(3) One way traffic	(1) Rain	
	(9) Unknown	(2) Sleet/hail	
		(3) Snow	
21	Number Of Travel Lanes	(4) Fog	
- ''	(1) One	(5) Rain and fog	
l	(2) Two	(6) Sleet and fog	
ļ	(3) Three	(7) Other (e.g., smog, smoke, blowing sand	or
	(4) Four	dust, etc.) (specify):	<b>.</b>
İ	(5) Five	1000, ( <b>0,000</b> ,),	
	(6) Six	(9) Unknown	
	(7) Seven or more	(a) Change	
	(9) Unknown	28. Traffic Control Device	/
	(O) CHARLOWII	(0) No traffic control(s)	
		(1) Traffic control signal (not RR crossing)	
22.	Roadway Alignment	(1) Trains control signal (not fill clossing)	·
	(1) Straight	Regulatory	
	(2) Curve right	(2) Stop sign	
	(3) Curve left	(3) Yield sign	
	(9) Unknown	(4) School zone sign	
		(5) Other regulatory sign (specify):	
~~	<b>5</b> 1 <b>5</b> 5	(3) Other regulatory sign (specify).	
	Roadway Profile	(6) Warning sign (not RR crossing)	
	(1) Level	(7) Unknown sign	
	(2) Uphill grade (>2%)		
	(3) Hill crest	(8) Miscellaneous/other controls including RR	
	(4) Downhill grade (>2%)	controls (specify):	
	(5) Sag	(O) Halmanna	
	(9) Unknown	(9) Unknown	
24	Roadway Surface Type	00 7 (7) 0 1 1 7 1	フ
	(1) Concrete	29. Traffic Control Device Functioning	_
		(0) No traffic control device	
	(2) Bituminous (asphalt)	(1) Traffic control device not functioning	
	(3) Brick or block	(specify):	
	(4) Slag, gravel, or stone	(2) Traffic control device functioning properly	'
	(5) Dirt	(9) Unknown	- 1
	(8) Other (specify):		
	(9) Unknown		
			1

Unknown roll direction

N	atio	nal Accident Sampling System-Crashworthiness Data	Sys	tem: G	eneral Vehic
		OCCUPANT RELATED	44.	Vehicle	e Cargo Wei Code weig
	37.	Driver Presence in Vehicle (0) Driver not present (1) Driver present (9) Unknown		(000) (450) (999)	10 kilograr Less than 4,500 kilo
	38.	Number of Occupants This Vehicle (00-96) Code actual number of occupants for this vehicle		Sourc	e: ROLL
		(97) 97 or more (99) Unknown	45.	Rollov	
l	39.	Number of Occupant Forms Submitted		• •	er (primarily
I		AIR BAG RELATED	(0	1-16)	Code the
	40.	Is this an AOPS Vehicle?  (0) No (includes unknown)  (1) Yes - researcher determined  (2) VIN determined air bag system		(17) (98) (99)	Rollover, (specify): Rollover-eabout the Rollover (c
		<ul> <li>(3) VIN determined automatic (passive) belts</li> <li>(4) VIN determined air bag and automatic (passive) belts</li> </ul>	46.	Rollov (00) N (01) T	rer Initiation No rollover Trip-over
	41.	Air Bag(s) Deployment, First Seat Frontal (0) Not equipped or not available (1) No air bags deployed		(03) T (04) C	Flip-over Furn-over Climb-over Fall-over
		Single Air Bag Vehicle (2) Driver air bag deployed (3) Driver air bag, unknown if deployed		(07)	Bounce-over Collision with Other rollove
		Multiple Air Bag Vehicle (4) Driver side only deployed (5) Passenger side only deployed (6) Driver and passenger side deployed		(99) (	Rolloverend Jnknown rol
		<ul> <li>(7) Driver and passenger side unknown if deployed</li> <li>(8) Air bag(s) deployed, details unknown</li> <li>(9) Unknown</li> </ul>	47.	(0) f (1) ( (2) (	ion of Rollov No rollover On roadway On shoulder
	42.	Air Bag(s) Deployment, Other Than First Seat Frontal (0) Not equipped with an "other" air bag		(4) ( (8) I	On shoulder On roadside Rolloverend Unknown
		<ul> <li>(1) Deployed during accident (as a result of impact)</li> <li>(2) Deployed inadvertently just prior to accident</li> <li>(3) Deployed, details unknown</li> </ul>	48.		ver Initiation Applicable cod
		<ul> <li>(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)</li> <li>(5) Unknown if deployed</li> </ul>	49.	Tripp (0) (1)	ion on Vehic ing Force Is No rollover Wheels/tires
		(7) Nondeployed (9) Unknown  Specify type of "other" air bag present:		(3) (4)	Side plane End plane Undercarriag Other location
				(6)	Non-contact
		VEHICLE WEIGHT ITEMS			Rolloveren Unknown
	4	3. Vehicle Curb Weight, O 9_0  Code weight to nearest 10 kilograms.	50	(O) (1)	ction of Initia No rollover Roll right - p axis
		(045) Less than 450 kilograms (610) 6,100 kilograms or more			Roll left - pr
		(999) Unknown $2, 999$ (bs X .4536 = $1, 999$ kgs			Rolloveren Unknown ro

Source:

# CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) (01-	No rollover 30) — Vehicle Number	(58)	Fence Wall Building
Noncol	lision	(60)	Ditch or culvert
	Turn-over — fall-over	(61)	Ground
(32)	No rollover impact initiation (end-over-end)	(62)	Fire hydrant
	Jackknife	(63)	Curb
(04)	O GORMANIO		Bridge
Collisio	on With Fixed Object	(68)	Other fixed object (specify):
(41)	Tree (≤ 10 cm in diameter)		
(42)	Tree (> 10 cm in diameter)	(69)	Unknown fixed object
	Shrubbery or bush		
	Embankment	Collisio	on with Nonfixed Object
, ,		(70)	Passenger car, light truck, van, or other
(45)	Breakaway pole or post (any diameter)		vehicle not in-transport
, ,			Medium/heavy truck or bus not in-transport
Nonbre	eakaway Pole or Post	(76)	Animal
(50)	Pole or post (≤ 10 cm in diameter)	(77)	Train
(51)	Pole or post (> 10 cm but ≤ 30 cm in	(78)	Trailer, disconnected in transport
,,,,	diameter)	(79)	Object fell from vehicle in-transport
(52) (53)	Pole or post (> 30 cm in diameter) Pole or post (diameter unknown)	(88)	Other nonfixed object (specify):
(00)	7 010 or poor (diameter diameter)	(89)	Unknown nonfixed object
(54)	Concrete traffic barrier	,	•
	Impact attenuator	(98)	Other event (specify):
	Other traffic barrier (includes guardrail)	•	
(00,	(specify):	(99)	Unknown event or object



1. Primary Sampling Unit Number

U.S. Department of Transportation	<b>EXTERIOR VEHICLE FORM</b>	NATIONAL ACCIDENT SAMPLING SYSTEM
National Highway Traffic Safety Administration	EXTENION VEHICLE PONIVI	CRASHWORTHINESS DATA SYSTEM
	1/9	_ ^ 3

	2 2
. Vehicle Number	03

2.	Case Nur	nber -	Stratum	/	2	<u>0</u>	A	

<b>VEHICLE</b>	IDENTIFICATIO	N

VIN 162J	B51KXH	7	Model Year 8 7
Vehicle Make (specify):	PONTIAC	Vehicle Model (specify): _	SUNBIRD

### LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush		
·	BEGINS 62 cm FORWARD LF AXLE	BSGINS 19 CM FORWARD LFAXE	72cm FORWAR LEAST		
2	BEGINS 100cm BACK LF AXXE	BEGINS 62 can BACK LF Arce	120 cm Back LF Axie		
	·				

### **CRUSH PROFILE IN CENTIMETERS**

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

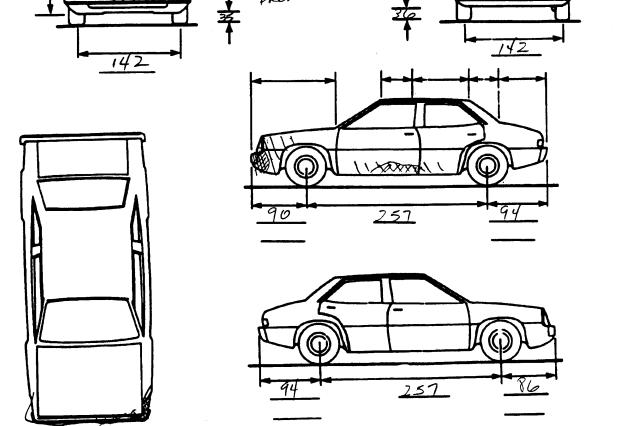
Specific		Direct D									
Impact Number	Plane of Impact C-Measurements	Width (CDC)	Max Crush	Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	±D
1	LEFT (FRONT)	27	CS	72	2	2	4	6	10	12	+205
	FREESPACE				0	1	1	1	2	5	
	RESULTANT	:			2	1	3	5	8	7	
		+									
2	LEFT	60	13	111	7	9	10	12	9	7	-1
	FREESPACE		7		7	7	7	7	7	7	
	RESULTANT		6		0	2	3	5	2	٥	
			BETWEEN								
			C3 & C4								

# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	$\frac{101.2}{1000000000000000000000000000000000000$	x 2.54 =	$\frac{257}{\text{cm}}$
Overall Length	175.7 inches	x 2.54 =	<u>446</u> cm
Maximum Width	<u>66.3</u> inches	x 2.54 =	
Curb Weight		x .4536 =	. <u>1,090</u> kg
Average Track	$\underline{55.3}$ inches	x 2.54 =	1 40 cm
Front Overhang	inches	x 2.54 =	cm
Rear Overhang	inches	x 2.54 =	cm
Undeformed End Width	inches	x 2.54 =	cm
Engine Size: cyl./displ.	cc	x .001 =	L
	CID	x .0164 =	L

### VEHICLE DAMAGE SKETCH WHEEL STEER ANGLES **ORIGINAL SPECIFICATIONS** TIRE-WHEEL DAMAGE (For locked front wheels or a. Rotation physically b. Tire displaced rear axles only) cm deflated Wheelbase restricted RF cm Overall Length LF RR cm Maximum Width LR ± 1.090 **Curb Weight** kg Within ± 5 degrees Average Track cm (1) Yes (2) No (8) NA (9) Unk. **DRIVE WHEELS** cm Front Overhang D FWD □ RWD □ 4WD 100 TYPE OF TRANSMISSION Rear Overhang cm ☐ Manual 139 Undeformed End Width cm **Approximate** END SHIFT ≥ 10 CM O Engine Size: cyl./displ. 4cvc /2.0 Cargo Weight kg ☐ Yes **□XNo**

**MEASUREMENTS IN CENTIMETERS** 



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

			CDC V	VORKSHE	El				
		С	ODES FOR	DBJECT CON	NTACTED				
(01-30)	— Vehicle Nu	mber		, , ,	7) Fence 8) Wall				
Noncoll					9) Building				
		ollover (excludes	end-over-en		0) Ditch or	culvert			
	Rollover-end				1) Ground				
	Fire or explosi	ion			2) Fire hydı 3) Curb	rant			
	Jackknife Other intravel	t damage (speci	641.		4) Bridge				
			· y / ·			Other fixed object (specify):			
	Noncollision is	njury ision (specify):		IR	9) Unknow	n fixed ohie	oct		
				•					
(39)	Noncollision -	<ul> <li>details unknov</li> </ul>	vn ,		sion with No			or other	
Collieio	n With Fixed O	hiect		()	0) Passeng	er car, light not in-trans:		or other	
(41)	Tree (≤ 10 c	m in diameter)		(7				in-transport	
	Tree (> 10 c				2) Pedestria			•	
	Shrubbery or	· ·		(7	3) Cyclist o	r cycle			
(44)	Embankment			(7	4) Other no	onmotorist o	or conveyand	ce	
(45)	Breakaway po	ole or post (any o	diameter)		5) Vehicle	occupant			
		_		•	(76) Animal				
	akaway Pole o			(77) Train (78) Trailer, disconnected in transport					
		≤ 10 cm in dian			8) Trailer, c 9) Object fo				
(51)	diameter)	> 10 cm but ≤	30 cm in		8) Object in				
(52)		> 30 cm in dian	neter)	,,	LR	IRE E LU	HEEL FO	com VI	
		diameter unknov		(8	9) Unknow	n nonfixed	object	<del></del>	
(54)	Concrete traff	fic barrier		(9	8) Other ev	ent (specify	<b>/</b> ):		
	Impact attenu	ator parrier (includes	auerdreil\	/9	9) Unknow	n event or o	hiect	<del> </del>	
(50)	(specify):	James (includes		(3	o, onknow	ii event or c	55,000		
		DEFORMA	TION CLASS	IFICATION E	BY EVENT N	UMBER			
	_					(5)	(0)		
Accident Event		(1) (2) Direction	incremental	(3)	Specific Longitudinal	Specific Vertical or	(6) Type of	(7)	
Sequence	e Object	of Force	Value of	Deformation	or Lateral	Lateral	Damage	Deformation	
Number	Contacted	(degrees)	Shift	Location	Location	Location	Distribution	Extent	
A 1									
02	03	280	00	L	F	E	E	01	
				<u></u>	F			<del></del>	
03		<u>280</u> <u>310</u>	00	<u>L</u>	FP	E	EW	0	
				<u>L</u> 	<u>F</u> <u>P</u>			<del></del>	
				<u>L</u> 	<u>F</u> <u>P</u>			<del></del>	
				<u>L</u> <u>L</u> —	<u>F</u> P			<del></del>	
				<u>L</u> 	<u>F</u> <u>P</u>			<del></del>	
				<u>L</u>	<u>F</u> <u>P</u>			<del></del>	
				<u>L</u>	<u>F</u> <u>P</u>			<del></del>	

COLLISION DEFORMATION CLASSIFICATION										
HIGHEST D	DELTA "V"									
Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent			
4.02	5.0 1	<b>6</b> . <u>0</u> <u>9</u>	7. <u>L</u>	8. <u>F</u>	9. <u>E</u>	10. <u>£</u>	11. <u>0</u>			
Second Highest Delta "V"										
12. <u>D</u> <u>3</u>	7 9 13. <u>88</u>	14. <u> </u> 0	15	16. <u> </u>	17. <u> </u>	18. <u>W</u>	19. 0 1			
		CRUS	H PROFILE	IN CENTI	METERS					
The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)										
HIGHEST [	DELTA "V"									
20. 	21. 					C <sub>6</sub>	22. 			
072	002	001	003	005	008 0	007	D 205			
Second Hi	ghest Delta "V	<b>n</b>								
23. 	24. C <sub>1</sub>					C <sub>6</sub>	25. 			
111	000	002	003	005	002	200	<u> </u>			
(Coded impact (250) (998) (999)	ormed End Widt d when highest is an end plane Code to the ne 250 centimete No highest sev Unknown Damage Width ghest severity in	severity e impact.) earest centime rs or more verity end plan		(650 (999 	inal Wheelbase Code to the centimeter Code to the centimeter Code to the centimeter Code to the centimeter	eters or more s x 2.54 = <u>2</u> <u>5</u> ack Width	2 5 7 7 centimeters 1 4 0			
(250)	Code to the ne 250 centimete Unknown	arest centime		(999	5) 185 centime	eters or more $\times$ $\times$ 2.54 = $///$	<u>O</u> centimeters			

				THE OVOTERA
				FUEL SYSTEM
30	Are CDCs Documented	0	35 1	ocation of Fuel Tank-1 Filler Cap
	but Not Coded on The			
	Automated File?		1	ocation of Fuel Tank-2 Filler Cap  O) No fuel tank
4	(0) No			1) On back plane
-	(1) Yes			2) Aft of center of the rear wheels (rear axle)
				on left side plane
04	December / Appearament of Vahiolo	$\circ$	(	3) Aft of center of the rear wheels (rear axle)
	Researcher's Assessment of Vehicle Disposition		١,	on right side plane  4) Forward of center of the rear wheels (rear
	(0) Not towed due to vehicle damage		<b>!</b> '	axle) on left side plane
	(1) Towed due to vehicle damage			(5) Forward of center of the rear wheels (rear
	(9) Unknown			axle) on right side plane
				(6) Over the center of the rear wheels (rear
		$\circ$		axle) on left side plane (7) Over the center of the rear wheels (rear
	Is This A Multi-Stage Manufactured Vehicle	<u>U</u>	· '	axle) on right side plane
	And/Or A Certified Altered Vehicle? (0) No post manufacturer modifications			(8) Other (specify):
	(1) Yes - post manufacturer modifications			(9) Unknown
	(specify):		ا <u>.                                    </u>	
	(0)00.177.		1	Type of Fuel Tank-1
				Type of Fuel Tank-2
	(Include photograph of CERTIFICATION		1	(0) No fuel tank (electrical vehicle) (1) Metallic
	PLACARD in case report)			(1) Metallic (2) Non-metallic
	(9) Unknown if vehicle is modified			(9) Unknown /
				Location of Fuel Tank-1
	FIRE OCCURRENCE			
		$\mathcal{D}$		Location of Fuel Tank-2 (0) No fuel tank
	Fire Occurrence	<u>U</u>		(1) Aft of center of the rear wheels (rear axle)
	(O) No fire			centered
	Yes, fire occurred			(2) Aft of center of the rear wheels (rear axle)
	(1) Minor			left side (3) Aft of center of the rear wheels (rear axle)
	(2) Major			right side
]	(9) Unknown		İ	(4) Forward of center of the rear wheels (rear
İ				axle) centered
24	Origin of Fire	0		(5) Forward of center of the rear wheels (rear
34.	(O) No fire		1	axle) left side (6) Forward of center of the rear wheels (rear
	(1) Vehicle exterior (front, side, back, top)		1	axle) right side
	(2) Exhaust system		1	(7) Over center of the rear wheels (rear axle)
	(3) Fuel tank (and other fuel retention			(8) Other (specify):
	system parts)			(9) Unknown
İ	(4) Engine compartment		41	Damage to Fuel Tank-1
1	(5) Cargo/trunk compartment			_
	(6) Instrument panel (7) Passenger compartment area		42.	Damage to Fuel Tank-2
	(8) Other location (specify):			(1) No damage to fuel tank
	(a) and read to the series			(2) Deformed, no seam failure
	(9) Unknown			(3) Deformed, with a seam failure
			1	(4) Punctured
				<ul><li>(5) Lacerated (ripped)</li><li>(6) Abraded (scraped)</li></ul>
				(7) Filler neck separation from the fuel tank
			1	(8) Other damage (specify):
1			1	(9) Unknown
			1	

				Data (	C. catama	Evenior	Vahicla	Form
National Accident	Sampling	System-C	rashwortniness	Data :	System:	EXIGUIO	ABILICIE	

43.	Leakage Location of Fuel System-1	47. Is This Vehicle Equipped With More Than
44.	Leakage Location of Fuel System-2	Two Fuel Tanks? (0) No (one or two tanks only)
	(0) No fuel tank	
	(1) No fuel leakage	Yes - More Than Two Tanks
	•	(1) Yes <u>no damage</u> to any tank or filler
	Primary Area Of Leakage	cap and <u>no fuel system leakage</u>
	(2) Tank	(2) Yes no damage to any tank or filler
	(3) Filler neck	cap but there is fuel system leakage
	(4) Cap	(specify leakage location):
	(5) Lines/pump/filter	
	(6) Vent/emission recovery	(3) Yes damage to an additional tank or
	(8) Other (specify):	filler cap and there is fuel system leakage
	(9) Unknown	(specify the following):
		Type of tank
	Fuel Type 1	Tank location
45.	Fuel Type-1	Filler cap location
•	Fuel Type-2	Tank damage  Location of leakage
46.	Fuel Type-2	Location of leakage
		Type of fuel(9) Unknown if more than two tanks
	Single Fuel Type	(9) Unknown if more than two tanks
	(00) No fuel tank	
	(01) Gasoline	
	(02) Diesel	COMMENTS
	(03) CNG (Compressed Natural Gas)	COMMENTS
	(04) LPG (Liquid Petroleum Gas) also	
	known as Propane	
	(05) LNG (Liquid Natural Gas) (06) Methanol (M100 or M85)	
	(07) Ethanol (E100 or E85)	
	(08) Other (Hydrogen or others) (specify):	
	Electric Powered or Electric/Solar	
	Powered Vehicles	
	(10) Lead Acid Battery	
	(11) Nickel-Iron Battery	
	(12) Nickel-Cadmium Battery	
	(13) Sodium Metal Chloride Battery	
	(14) Sodium Sulfur Battery	
	(18) Other (Specify):	
	(98) Other Hybrid (specify):	
	(99) Unknown fuel type	
	(99) Unknown fuel type	
	*** STOP: IF THE CDS APPLICAB	LE VEHICLE WAS NOT TOWED ***
	(GV	10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

PSU NUMBER
CASE NUMBER
VEHICLE NUMBER

49 120A 03

# INTERIOR VEHICLE FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

W	Entire Form
ſΊ	PAGE NUMBER (S)

PSU NUMBER

CASE NUMBER

/20A

VEHICLE NUMBER

OCCUPANT NUMBER

N/A

# OCCUPANT ASSESSMENT FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

19	ENTIRE FORM	
[]	Page Number (s)	

PSU NUMBER 49

CASE NUMBER /20A

VEHICLE NUMBER 03

OCCUPANT NUMBER N/A

# OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

[9]	ENTIRE FORM	
[]	PAGE NUMBER (S)	



C4

C5

**C6** 

# SMASH Program Summary 87-93 (All Measurements in Metric)

National Highway Traffic Safety Administration	(All Measure	ments in Meure)	Crashworthiness Data System
Identifying Title 49	120 A	0 1	95
PSU	Case No Stratum	Sequence No.	Date (month, day, year) of Run
Vehicle 1		cle Information	Vehicle 2 2
Year	1992 64	Year	1995
Make <u>Chevr</u>	<del></del> 64	Make .	
Model <u>Cemo</u>	· · · · · · · · · · · · · · · · · · ·	Model	Ford
Body Style	. Hetal bak	Body Style	Econoline 150 Van
NASS Veh. No.		NASS Veh. No.	
CDC	AW04	CDC	missing
Damaged Side (Missing Veh. Only)		Damaged Side (M	
PDOF	-30°	PDOF	<u>+50</u> °
HDG Angle	350	HDG Angle	90
Vehicle 1	Vehicle S	pecifications	Vehicle 2
Wheelbase	257 mm	Wheelbase	351 mm
OAL		OAL	538 ~~
OAW		OAW	202 mm
Weight:		Weight:	
1408 D	<b>\$</b> 61 1469 kg	2121 136	155 2412 kg
Curb + Cargo + Oc	ccupants =	Curb + Cargo	+ Occupants =
Engine Displacement	3. 1	Engine Displace	
Drive System	PWD	Drive System	RWD
Size	3	Size	7
Stiffness	3	Stiffness	$\left(\begin{array}{c} 1 \\ 1 \end{array}\right)$
Vehicle 1	Damage	Information	Vehicle 2
Damage known?	yes	Damage known?	the contract of the contract o
Damage length	<u> 992</u> cm	Damage length	178 cm
Damage offset	<u> </u>	Damage offset	- <u>O</u> cm
Crush Depth:		Crush Depth:	
C1 .		C1	+cm
C2	<u> 2                                   </u>	C2	cm w K
C3	<u>54</u> cm	C3	cm

C4

C5

**C6** 

cm

cm

cm

# National Accident Sampling System - Crashworthiness Data System: SMASH Program Summary

Vehicle 1			Scene	Information		Vehicle ?	2	
Rest and Impact Positions	[ ]	]yes	[ ]no					
Rest position X			m	Res	st position X			m
Rest position Y			m	. 11	st position Y			m
Rest position angle			deg	III .	st position an	gle		deg
Impact position X			m	- 11	pact position			m
Impact position Y			m		pact position			m
Impact position angel			deg deg		pact position	angel		deg
Slip angle					angle			deg
Vehicle 1			Veh	icle Motion		<u>Vehicle</u>	2	
Vehicle Rotation	[	]yes	[ ]no	Vehicle I	Rotation	Townson Commence Control of the Cont	[ ]yes	[ ]no
Rotation Stop Before Rest	[	]yes	[ ]no	Rotat	tion Stop Bet	fore Rest	[ ]yes	[ ]no
End of Rotation			m		of Rotation			m
Position	Y		m	Positi	ion		Y	m
	PSI		m				SI	m
Curved Path	[	]yes	[ ]no	Curved P	Path	والمنافعة المراوعة	[ ]yes	[ ]no
Point on Path	X_		m	Point	t on Path		x	m
-	Y_		m				Y	m
[Rotation Direction [ ]Nor	ne [	]CW	[ ]CCW	Rotation	Direction	[z]None	[]@W	[ ]@CW
Rotation >360 deg	[	]yes	[ ]no	Rotation	>360 deg		[ ]yes	[ ]no
Friction Inform	nation					jectory Info	ormation	
Coefficient of Friction				Trajector	y Data	موسورتان در مرسوبیور مسیوبی از این این از در میشوبیور از این این این این این این این این این این	[/ ]yes	]no
Rolling Resistance Option				Vehic	cle 1 Steer A	ngle		
Vehicle 1 Rolling Resistance	ce			LI	F	_ RF		
LF RF	` <u> </u>			L	R	_ RR		
LRRR	· · _				cle 2 Steer A	_		
Vehicle 2 Rolling Resistan	ce				F			
LF RF				11	R			
LR RR	٠				Boundary		l jyes.	no
				First 1				
						m	Y	m
				Secor	nd Path			
						m	Y	m
				Coefficie	ent of Friction	n	•	

Page 1

, 1995

Summary of Results Using Damage

### ROLDMISS Crash

Speed Change (ROLDMISS)

Vehicle #1

Total 68 km/h (42 mph)
Longitudinal -59 km/h (-37 mph)
Latitudinal 34 km/h (21 mph)

PDOF Angle -30 °

Energy Dissipated = 433558 Joules (319733 Ft-Lb)
Barrier Equivalent Speed = 76.0 km/h (47.2 mph)

Calculated using crush coefficients calculated from vehicle parameters.

Vehicle #2

d0 crush coeff.

d1 crush coeff.

Total 41 km/h ( 26 mph)
Longitudinal -27 km/h ( -17 mph)
Latitudinal -32 km/h ( -20 mph)
PDOF Angle 50 °

Energy Dissipated = 204192 Joules ( 150584 Ft-Lb)
Barrier Equivalent Speed = 34.5 km/h ( 21.4 mph)

Calculated using crush coefficients calculated from vehicle parameters.

### General Information

	Vehicle #1	Vehicle #2
Year	1992	1995
Make	Chevrolet	Ford
Model	Camaro	Econline 150
CDC	11LDAW4	MISSING
Side Damaged	L	F
PDOF Angle	-30 °	50 °
Heading Angle	350 °	90 °

Calculation method: Calculated Crush Coeff. Calculated Crush Coeff.

63.27 sqrt(N) 9.27 sqrt(N)/cm 86.67 sqrt(N) 9.32 sqrt(N)/cm 1995

### Damage Information

### Page 2

	Vehicle #1	Vehicle #2
Vehicle Damage Known	Yes	No
Crush Length	292.0 cm ( 115 in)	0.0 cm ( 0 in)
C1	6.0 cm ( 2 in)	0.0 cm ( 0 in)
C2	26.0 cm ( 10 in)	0.0 cm ( 0 in)
C3	54.0 cm ( 21 in)	0.0 cm ( 0 in)
C4	41.0 cm ( 16 in)	0.0 cm ( 0 in)
C5	36.0 cm ( 14 in)	0.0 cm ( 0 in)
C6	4.0 cm ( 2 in)	0.0 cm ( 0 in)
D ;	-41.9 cm (-16 in)	0.0 cm ( 0 in)
D'	-39.6 cm ( -16 in)	0.0 cm ( 0 in)

### Vehicle Dimensions

	Vehicle #1	Vehicle #2
Length	4890 mm ( 193 in)	5380 mm ( 212 in)
Width	1840 mm ( 72 in)	2020 mm ( 80 in)
Wheelbase	2571 mm ( 101 in)	3510 mm ( 138 in)
Weight	1470 kgs ( 3241 lbs)	2412 kgs ( 5318 lbs)
CG to Front of Veh	2281 mm ( 90 in)	1920 mm ( 76 in)
Engine Displacement		4.9 liters
Moment of Inertia	317566 kgs ( 28108 lbs)	630726 kgs ( 55827 lbs)
Vehicle Mass	1470 kgs ( 8.4 lb-s^2/in)	2412 kgs ( 13.8 lb-s^2/in)

# ImpAcT # 2 V, > V3

U.S. Department of Transpo		SHPC PROC				
National Highway Traffic Saf Administration	ety	(All Measure	ments In Metric)		ACCIDENT SAISHWORTHINES	
Identifying Title	, ,	<b>A</b>	42			,
<u> 4</u> 1_	<u> </u>	4			7	<u> </u>
Primary Sampling Unit	Case NoStratur		sccident Event Sequence No.	Date (Month, c	lay, year) of Ru	n
CRASHPC Vehicle Id	entification					
Vehicle 1	1992	CHEVRO	DLE1	CAMARO		0/_
Vehicle 2	<u> 1987                                     </u>	PONTI	4c'	SWBIRD		03
	Year	Make		Model		NASS Veh. No.
		GENERAL IN	IFORMAT	ION ·		
	VEHICLE I			VEHICLE	2	_
Size		3	Size			2
Weight	,		Weight	_		0
1408+ 61+	0 = /4	<u>69</u> kg	1090		116	<u></u> 8 kg
Curb Occupant(s)	Cargo	E 1.1 30		Occupant(s) Cargo		,
CDC		<u> </u>	CDC		- <i></i>	<u> </u>
PDOF (-180 to +180	)	<u>60°</u>		80 to +180)	0_0_	<u> </u>
Stiffness		<u>∃</u> <sub>×</sub>	Stiffness			
		SCENE INF	ORMATIC	ON		
Rest and Impact Pos	itions [ ] No. Ga	To Damage Inf	ormation [	I Yes		
	VEHICLE 1	—————————————————————————————————————	er er er er er er er	VEHICLE 2	2	-
			D	V		
Rest Position	X Y	· m	Rest Position	X _		_ · m
		m		Υ _		- · m
	PSI	- — <del>—</del>		PSI		
Impact	х	m	Impact Position	Х _		m
Position	Υ	m	Position	Υ _		m
	PSI	· · · · · ·		PSI		<u> </u>
Slip Angle(-180 to +	180)	· °	Slip Angle	e (-180 to +180)		· ·
		VEHICLE	MOTION			
Sustained Contact	]No [ ]Yes					
V	VEHICLE 1			VEHICLE 2	!	
Vehicle Rotation	[ ] No	[ ] Yes	Vehicle R	otation	[ ] No	[ ] Yes
Rotation Stop Be				ion Stop Before Rest		[ ] Yes
notation otop bo	iore nest ( ) ne	( ) (03	notati	ion Stop before nest	[ ] 140	1 1103
End of Rotation Position		· m	End o Positi	f Rotation X		m
1 03.0011		m	rositi	Υ _		m
	PSI	· · · · · · · ·		PSI		°
Curved Path	[ ] No	[ ] Yes	Curved Pa	ath	[ ] No	[ ] Yes
Point on Path				on Path	•	
×	m Y	· m	×		Y	_ · m

Rotation Direction [ ] None [ ] CW [ ] CCW

Rotation >360° [ ] No [ ] Yes

Rotation Direction [ ] None [ ] CW [ ] CCW

Rotation >360° [ ] No [ ] Yes

National Accident Sampling System-Crashworthiness Data System: CRASHPC Program Summary

FRICTION INFORMATION	TRAJECTOR	Y INFORMATION
	Trajectory Data [ ]	No [   Yes
Coefficient of Friction	If No, Go To Damage	
Rolling Resistance Option	Vehicle 1 Steer Angle	e
Vehicle 1 Rolling Resistance		° RF °
LF RF	LR	• RR •
LR RR		
	Vehicle 2 Steer Angle	s
Vehicle 2 Rolling Resistance		
LF RF	LR	° RF ° °
LR RR		
	Terrain Boundary [	] No [ ] Yes
	First Point	
	X m	Y m
	Second Point	
	X	Y m
	Secondary Coefficient	of Friction
DAMAGE IN	NFORMATION	
VEHICLE 1	VI	EHICLE 2
Damage Length L Q 6 4 cm	Damage Length	L <u>D 7 2 cm</u>
i e		
Crush Denths C. O O 2 cm	Crush Denths	c. 002 cm
Crush Depths C <sub>1</sub> O O 2 cm C <sub>2</sub> O S cm	Crush Depths	C, <u>0 0 2 cm</u> C, <u>0 0 1 cm</u>
Crush Depths $C_1$ $O$ $O$ $O$ $O$ $O$ $O$ $O$ $O$ $O$ $O$	Crush Depths	C <sub>2</sub> 00 1 cm
Crush Depths $C_1$ $O$ $O$ $C_2$ cm $C_2$ $O$ $O$ $C_3$ $O$ $O$ $O$ $O$ $O$ $O$ $O$ $O$ $O$ $O$	Crush Depths	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Crush Depths	C <sub>2</sub>
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Crush Depths	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$C_{2}$ $O$ $O$ $S$ cm $C_{3}$ $O$ $I$ $S$ cm $C_{4}$ $O$ $I$ $S$ cm $C_{5}$ $O$ $I$ $S$ cm $C_{6}$ $O$ $I$ $S$ cm		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Crush Depths  Damage Offset	$C_{2}$ $O$ $O$ $O$ $O$ cm $C_{3}$ $O$ $O$ $O$ $O$ cm $C_{4}$ $O$ $O$ $O$ $O$ $O$ cm $C_{5}$ $O$ $O$ $O$ $O$ $O$ $O$ $O$ $O$ $O$ $O$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Damage Offset	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$C_{2}$ $O$ $O$ $S$ cm $C_{3}$ $O$ $I$ $S$ cm $C_{4}$ $O$ $I$ $S$ cm $C_{5}$ $O$ $I$ $S$ cm $C_{6}$ $O$ $I$ $S$ cm	Damage Offset	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Damage Offset .E <i>NOT IN TRANSPORT,</i> FILL	$C_{2}$ $O$
C <sub>2</sub> O O S cm C <sub>3</sub> O / 3 cm C <sub>4</sub> O / 7 cm C <sub>5</sub> O / 1 cm C <sub>6</sub> O / 3 cm  Damage Offset D P / 9 9 cm  IF THIS COMMON IMPACT WAS WITH A MOTOR VEHICLE  Model Year:	Damage Offset .E <i>NOT IN TRANSPORT,</i> FILL	$C_2$ O O C C C C C C C C C C C C C C C C C
C <sub>2</sub>	Damage Offset  E NOT IN TRANSPORT, FILL  The Weight, CDC, Scene	$C_2$ O O C C C C C C C C C C C C C C C C C
C <sub>2</sub>	Damage Offset  E NOT IN TRANSPORT, FILL  The Weight, CDC, Scene	$C_2$ O O C C C C C C C C C C C C C C C C C
C <sub>2</sub>	Damage Offset  E NOT IN TRANSPORT, FILL  The Weight, CDC, Scene	$C_2$ O O C C C C C C C C C C C C C C C C C
C <sub>2</sub>	Damage Offset  E NOT IN TRANSPORT, FILL  The Weight, CDC, Scene for this vehicle should be	$C_2$ O O C C C C C C C C C C C C C C C C C

# IMPACT #2 V, -> V3

## SUMMARY OF CRASHPC RESULTS USING DAMAGE

### CRASH3 RECONSTRUCTION

SPEED CHANGE (DAMAGE)

VEHICLE #1 5 KPH ( 3 MPH) TOTAL LONGITUDINAL -2 KPH ( -2 MPH) 4 KPH ( 3 MPH) LATITUDINAL PDOF ANGLE -60 DEGREES ENERGY DISSIPATED = 6311 JOULES ( 4654-FT-LB) VEHICLE #2 TOTAL 6 KPH ( 4 MPH) -1 KPH ( -1 MPH) LONGITUDINAL LATITUDINAL 6 KPH ( 4 MPH) PDOF ANGLE -80 DEGREES ENERGY DISSIPATED = 1691 JOULES ( 1247 FT-LB)

### DAMAGE DATA

### VEHICLE #1

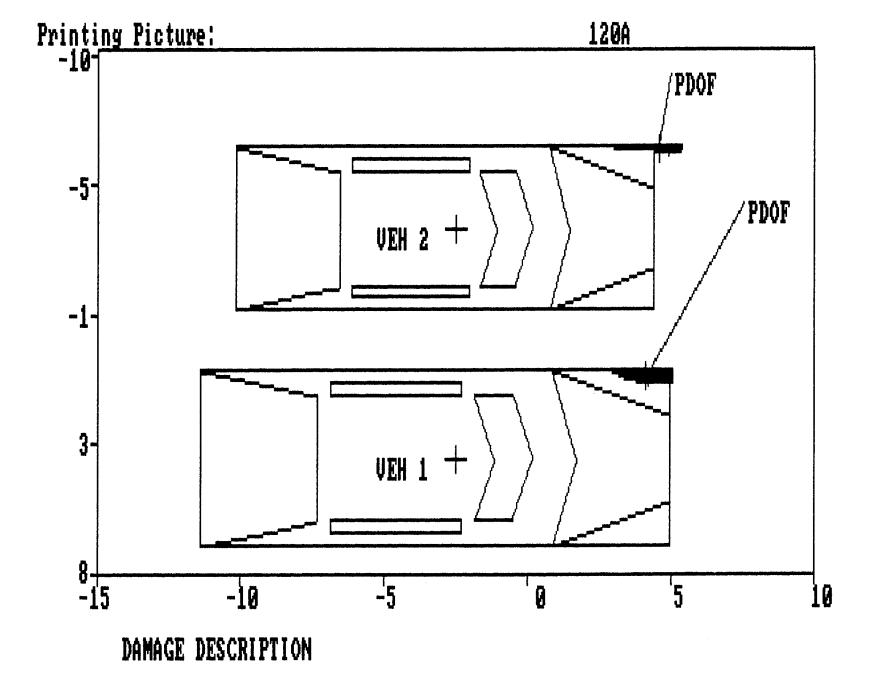
### VEHICLE #2

SIZE CATEGORY STIFFNESS CATEGORY	3	2 2
VEHICLE WEIGHT	1469 KGS ( 3239 LBS)	1168 KGS ( 2575 LBS)
CDC	10LFEW2	O9LFEE1
PDOF ANGLE	-60 DEGREES	-80 DEGREES
CRUSH LENGTH	64 CM. ( 25 IN.)	72 CM. ( 28 IN.)
C1	2 CM. ( 1 IN.)	2 CM. ( 1 IN.)
C2	8 CM. ( 3 IN.)	1 CM. ( O IN.)
C <b>3</b>	13 CM. ( 5 IN.)	3 CM. ( 1 IN.)
C4	17 CM. ( 7 IN.)	5 CM. ( 2 IN.)
C <b>5</b>	11 CM. ( 4 IN.)	8 CM. ( 3 IN.)
C <b>6</b>	13 CM. ( 5 IN.)	7 CM. ( 3 IN.)
D	199 CM. ( 78 IN.)	205 CM. ( 81 IN.)
D'	203 CM. ( 80 IN.)	216 CM. ( 85 IN.)

(\* INDICATES DEFAULT VALUE)

### DIMENSIONS AND INERTIAL PROPERTIES

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	130 CM. ( 51 IN.)	118 CM. ( 46 IN.)
CG TO REAR AXLE	141 CM. ( 56 IN.)	127 CM. ( 50 IN.)
TRACK	150 CM. ( 59 IN.)	139 CM. ( 55 IN.)
CG TO FRONT OF VEH	228 CM. ( 90 IN.)	212 CM. ( 83 IN.)
CG TO REAR OF VEH	-270 CM. (-106 IN.)	-233 CM. ( -92 IN.)
CG TO SIDE OF VEH	92 CM. ( 36 IN.)	85 CM. ( 34 IN.)
MOMENT OF INERTIA	12696 KGS ( 27990 LBS)	8962 KGS ( 19757 LBS)
VEHICLE MASS	4 KGS ( 8 LBS)	3 KGS ( 7 LBS)



# V3 Impact #3 BARRIER

0

U.S. Department of Transportation

### CRASHPC PROGRAM SUMMARY

National	Highway	Traffic	Safety	

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

dministration				CHASE	WORTHINESS	S DATA STSTEN
Identifying Title  49  Primary	/ 2 O /		O 3 cident Event quence No.	Date (Month, day	9 (, year) of Ru	5_
Sampling Unit		Jet	quence No.			
CRASHPC Vehicle Id  Vehicle 1	entification 1987	PONTIA	<u>_</u>	SUNBIRD		03
Vehicle 2	Year	Make		Model		NASS Veh. No.
	G	ENERAL IN	FORMATIO	ON ·		
	VEHICLE I			VEHICLE 2	L	
Size	VEITHOLE	2	Size			11
Weight			Weight			<u> </u>
1000 + 10 +	0 - 1 1/	> <b>8</b> kg	+ +	+ =		kg
Curb Occupant(s)	Cargo	<u> </u>	Curb Oc	ccupant(s) Cargo		
CDC _	YOLPE	<u> </u>	CDC			
PDOF (-180 to +180	o) 👌 🙍 į	<b>5</b> 0°	PDOF (-18	0 to +180)	<u>+</u>	0
Stiffness		2	Stiffness			
		SCENE INFO	JRIVIATIO	<u> </u>		
Rest and Impact Pos	itions [ ] No, <i>Go</i> 7	To Damage Info	rmation [	I Yes		
	VEHICLE 1			VEHICLE 2		
Post	x	, m	Rest	X		, m
Rest Position	^	· · · m	Position	Y		· m
	PSI	<u> </u>		PSI		
				, 31		
Impact Position	х	m	Impact Position	х _		_ · m
rosition	Υ	m	1 00.11011	Υ		_ · m
	PSI	· · · · · · · · · · · · · · · · · · ·		PSI	<del></del>	o
Slip Angle(-180 to +	- 180)	<u> </u>	Slip Angle	(-180 to +180)		· · · · · · · · · · · · · · · · · · ·
		<b>VEHICLE</b>	MOTION			
Sustained Contact	[ ]No [ ]Yes					
	VEHICLE 1			VEHICLE 2		
4.63.4.5	( ) No	( ) Von	Vehicle Ro	tation	[ ] No	[ ] Yes
Vehicle Rotation				on Stop Before Rest		[ ] Yes
Hotation Stop Be	efore Rest [ ] No	( ) Tes	notatic	on Stop before nest	[ ] NO	( ) (63
End of Rotation	x	m	End of Positio	Rotation X		_ · m
Position	Υ	m	Positio	Υ		m
	PSI	· · · · · ·		PSI		· · · · · · · · ·
Curved Bath	[ ] No	[ ] Yes	Curved Pat	·h	[ ] No	[ ] Yes
Curved Path Point on Path	[ ] 140	1 1103	Point o		( ) 140	, , , , , ,
X	m Y	m		m \	′ <u> </u>	m
		-	Datation D	fraction ( thin-	1 1 (14)	1 1 CC/N
Rotation Direction  Rotation > 360°	[ ] None [ ] CW [ ] No [ ] Yes	I I CC AA		irection [ ] None > 360° [ ] No		, ,,
1101011011 / 000	, ,					

National Accident Sampling System-Crashworthiness Data System: CRASHPC Program Summary

FRICTION INF	ORMATION	TRAJECTOR	Y INFORMATION
		Trajectory Data [ ]	No [ ] Yes
Coefficient of Friction	·	If No, Go To Damage	
Rolling Resistance Option		Vahiala 1 Stear Angla	•
Vehicle 1 Rolling Resist	ance	Vehicle 1 Steer Angles	° RF °
	RF	LR	
	RR		
		Vehicle 2 Steer Angle	s
Vehicle 2 Rolling Resist	ance	LF	° RF °
LF	RF	LR	° RR °
LR	RR		
		Terrain Boundary	] No [ ] Yes
		First Point	
		X m	Y m
		Second Point	
		X m	Y m
		Secondary Coefficient	of Friction
	DAMAGE IN	FORMATION	
VEHIC			EHICLE 2
VEINGE			
Damage Length	L <u>/ / /</u> cm	Damage Length	L cm
Crush Depths	C, <u>O O O</u> cm	Crush Depths	C <sub>1</sub> cm
	$C_2$ OOOcm		C <sub>2</sub> cm
	C <sub>3</sub> 0 0 3 cm		C <sub>3</sub> cm
	$C_4 = \frac{0}{2} = \frac{0}{2} = cm$		C <sub>4</sub> cm
	$C_s = 0 0 2 cm$		C <sub>5</sub> cm
	$C_6  O  O  cm$		C <sub>6</sub> cm
Damage Offset	D & 00 1 cm	Damage Offset	D + cm
IF THIS COMMON IMPACT	WAS WITH A MOTOR VEHICLE	E NOT IN TRANSPORT, FILL	IN THE INFORMATION BELOW.
Model Year:		The Weight, CDC, Scene	e Data and Damage Information
Make:		for this vehicle should b	e recorded above.
Model:			
VIN:			
			· · · · · · · · · · · · · · · · · · ·
Complete and A	TTACH the appropriate vehic	le damage sketch and dim	ensions to the Form.

# V3 Impact #3 BARRIER

### SUMMARY OF CRASHPC RESULTS USING DAMAGE

### CRASH3 RECONSTRUCTION

### SPEED CHANGE (DAMAGE)

VEHICLE #1 TOTAL 7 KPH ( 4 MPH) LONGITUDINAL -5 KPH ( -3 MPH) LATITUDINAL 6 KPH ( 3 MPH) -50 DEGREES PDOF ANGLE ENERGY DISSIPATED = 2693 JOULES ( 1986 FT-LB) VEHICLE #2 0 KPH ( 0 MPH) 0 KPH ( 0 MPH) 0 KPH ( 0 MPH) TOTAL LONGITUDINAL LATITUDINAL TOTAL o DEGREES PDOF ANGLE ENERGY DISSIPATED = 0 JOULES ( 0 FT-LB)

## DAMAGE DATA

### VEHICLE #1

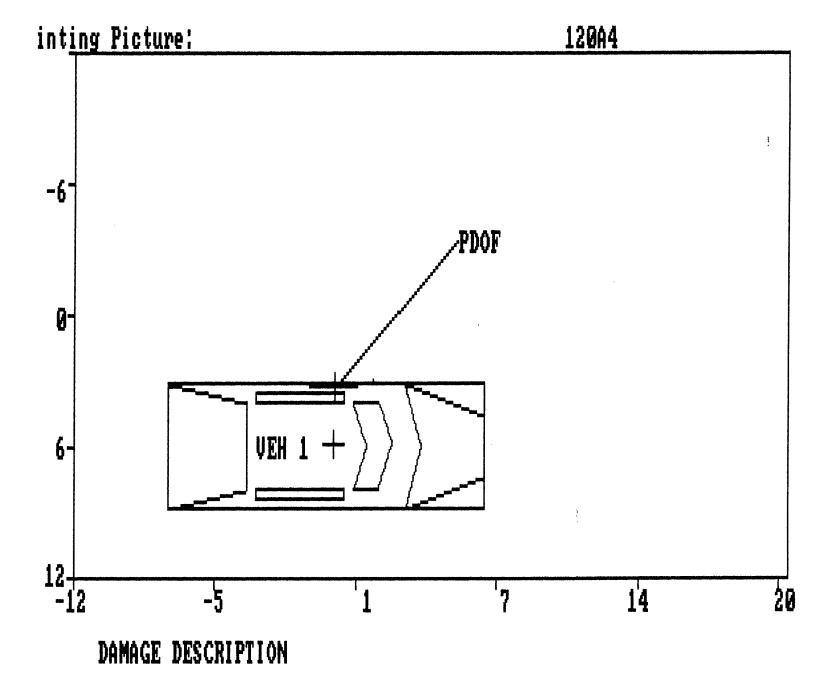
### VEHICLE #2

SIZE CATEGORY STIFFNESS CATEGORY	2 2	11 O
VEHICLE WEIGHT	1168 KGS ( 2575 LBS) 10LPEW1	***** KGS (2204586 LBS) * BARRIER
PDOF ANGLE	-50 DEGREES	O DEGREES *
CRUSH LENGTH	111 CM. ( 44 IN.)	0 CM. ( 0 IN.) *
C1	0 CM. ( 0 IN.)	O CM. ( O IN.) *
C2	2 CM. ( 1 IN.)	0 CM. ( 0 IN.) *
C3	3 CM. ( 1 IN.)	0 CM. ( 0 IN.) *
C4	5 CM. ( 2 IN.)	0 CM. ( 0 IN.) *
C <b>5</b>	2 CM. ( 1 IN.)	0 CM. ( 0 IN.) *
C <b>6</b>	0 CM. ( 0 IN.)	0 CM. ( 0 IN.) *
D	-1 CM. ( O IN.)	0 CM. ( 0 IN.) *
D'	1 CM. ( O IN.)	0 CM. ( 0 IN.) *

(\* INDICATES DEFAULT VALUE)

### DIMENSIONS AND INERTIAL PROPERTIES

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	118 CM. ( 46 IN.)	127 CM. ( 50 IN.)
CG TO REAR AXLE	127 CM. ( 50 IN.)	127 CM. ( 50 IN.)
TRACK	139 CM. ( 55 IN.)	127 CM. ( 50 IN.)
CG TO FRONT OF VEH	212 CM. ( 83 IN.)	127 CM. ( 50 IN.)
CG TO REAR OF VEH	-233 CM. ( -92 IN.)	-127 CM. ( -50 IN.)
CG TO SIDE OF VEH	85 CM. ( 34 IN.)	127 CM. ( 50 IN.)
MOMENT OF INERTIA	8962 KGS ( 19757 LBS)	***** KGS (***** LBS)
VEHICLE MASS	3 KGS ( 7 LBS)	2600 KGS ( 5732 LBS)



0

U.S. Department of Transportation

### **CRASHPC PROGRAM SUMMARY**

National	Highway	Traffic	Safety

(All Measurements In Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM

dministration				CRASHWORTHINE	SS DATA SYSTEM
Identifying Title Primary Sampling Unit	Case NoStratum		2 lent Event lence No.	Date (Month, day, year) of F	7 <u>5</u>
CRASHPC Vehicle Id Vehicle 1 Vehicle 2	lentification 1992	CHEVROLE	7	CAM ARO	01
	Year	Make		Model	NASS Veh. No.
	G	ENERAL INFO	ORMAT	rion ·	
	VEHICLE I			VEHICLE 2	
Size	•	3	Size		<u>/                                    </u>
Weight  / 408 + 6/ Curb Occupant(s)	$\frac{\mathcal{O}}{Cargo} = \frac{1}{4} \frac{4}{6}$	, <u>9</u> kg	Weight	++=	kg
CDC	<u> 10 L F E</u>	<u>. W Z</u>	CDC		
PDOF (-180 to +180	0) <u> </u>			180 to +180)	· — — °
Stiffness		<u>3</u>	Stiffness	s	
		SCENE INFOR	RMATI	ON	
n					
***************************************	itions [ ] No, <i>Go 7</i> VEHICLE 1	o vamage miorii	1800n	VEHICLE 2	
Rest	x	m	Rest	x	m
Position	Υ	m	Position	Υ	m
	PSI	· · · · · ·		PSI	· °
Impact	X	. m	Impact	X	m m
Position	Ŷ	· ''' m	Impact Position	Ŷ	·'''   . m
	PSI	· · ·		· PSI	··
Slip Angle(-180 to +		•	Slip And	gle (-180 to +180)	•
		VEHICLE IV			
		VEHICLE IV			
Sustained Contact	***************************************			V511101.5.0	
	VEHICLE 1			VEHICLE 2	
/ehicle Rotation	I I No	i j Yes	Vehicle	Rotation [ ] No	[ ] Yes
Rotation Stop Be	efore Rest [ ] No	[ ] Yes	Rota	ation Stop Before Rest [ ] No	[ ] Yes
End of Rotation Position	X	. m	End	of Rotation X	. m
Position	Υ	m	Posi	ition Y	m
	PSI	o		PSI	o
Curved Path	[ ] No	[ ] Yes	Curved		[ ] Yes
Point on Path	- V	<b>~</b>		nt on Path	
×	m Y	m	Х_	m Y	· m
Rotation Direction	[ ] None [ ] CW	I I CCW	*************		V I 1 CCW
Rotation > 360°	[ ] No [ ] Yes		Rotatio	n >360° [ ] No [ ] Yes	

National Accident Sampling System-Crashworthiness Data System: CRASHPC Program Summary

FRICTION INFORMATION	TRAJECTORY INFORMATION	N
	Trajectory Data [ ] No [ ] Yes	
Coefficient of Friction	If No, Go To Damage Information	
Rolling Resistance Option	Vehicle 1 Steer Angles	
Vehicle 1 Rolling Resistance	LF ° RF	0
LF RF	LR ° RR	o
LR RR		
	Vehicle 2 Steer Angles	
Vehicle 2 Rolling Resistance	LF ° RF	<u> </u>
LF RF	LR ° RR	
LR RR		
	Terrain Boundary [ ] No [ ] Yes	
	First Point	
	X m Y	· m
	Second Point	
	X	· m
	Secondary Coefficient of Friction	
DAMAGE I	NFORMATION	
VEHICLE 1	VEHICLE 2	
Damage Length L <u>D</u> 64 cm	Damage Length L	cm
Crush Depths C, <u>O</u> <u>O</u> <u>2</u> cm	Crush Depths C <sub>1</sub>	_ cm
$C_2 = 0 = 8$ cm	C <sub>2</sub>	
$C_3 = 0 / 3 \text{ cm}$	C <sub>3</sub>	cm
$C_{4} = 0.7 = 7$ cm	C	cm
$C_{s} = \frac{C_{s}}{C} \frac{1}{I} cm$	C,	cm
C <sub>6</sub> <u>0 / 3</u> cm	C <sub>6</sub>	cm
Damage Offset D D 199 cm	Damage Offset D ±	cm
Damage Offset D = 1 1 cm	Damage Offset	
IF THIS COMMON IMPACT WAS WITH A MOTOR VEHIC	LE <i>NOT IN TRANSPORT,</i> FILL IN THE INFORMATIO	N BELOW.
Model Year:	The Weight, CDC, Scene Data and Damage I	nformation
Make:	for this vehicle should be recorded above.	
Model:		
VIN:		
Complete and ATTACH the appropriate veh	cle damage sketch and dimensions to the Form	۱.

# VI Impact # 2 BARRIER

### SUMMARY OF CRASHPC RESULTS USING DAMAGE

CRASHS RECONSTRUCTION

# SPEED CHANGE (DAMAGE)

	(DUIDOE)
VEHICLE #1	
TOTAL	8 KPH ( 5 MPH)
LONGITUDINAL	-4 KPH ( -2 MPH)
LATITUDINAL	7 KPH ( 4 MPH)
PDOF ANGLE	-60 DEGREES
ENERGY DISSIPATED =	6311 JOULES ( 4654 FT-LB)
VEHICLE #2	
TOTAL	OKPH ( OMPH)
LONGITUDINAL	OKPH ( OMPH)
LATITUDINAL	OKPH ( OMPH)
PDOF ANGLE	O DEGREES
ENERGY DISSIPATED =	O JOULES ( O FT-LB)

### DAMAGE DATA

VEHICLE #1

C6

D

D'

SIZE CATEGORY	3	11
STIFFNESS CATEGORY	3	0
VEHICLE WEIGHT	1469 KGS ( 3239 LBS)	***** KGS (2204586 LBS) *
CDC	10LFEW2	BARRIER
PDOF ANGLE	-60 DEGREES	O DEGREES *
CRUSH LENGTH	64 CM. ( 25 IN.)	0 CM. ( 0 IN.) *
C1	2 CM. ( 1 IN.)	0 CM. ( 0 IN.) *
C2	8 CM. ( 3 IN.)	0 CM. ( 0 IN.) *
C3	13 CM. ( 5 IN.)	0 CM. ( 0 IN.) *
C4	17 CM. ( 7 IN.)	0 CM. ( 0 IN.) *
C <b>5</b>	11 CM. ( 4 IN.)	0 CM. ( 0 IN.) *

13 CM. ( 5 IN.)

199 CM. ( 78 IN.)

203 CM. ( 80 IN.)

(\* INDICATES DEFAULT VALUE)

0 IN.) \*

0 IN.) \*

0 IN.) \*

O CM. (

O CM. (

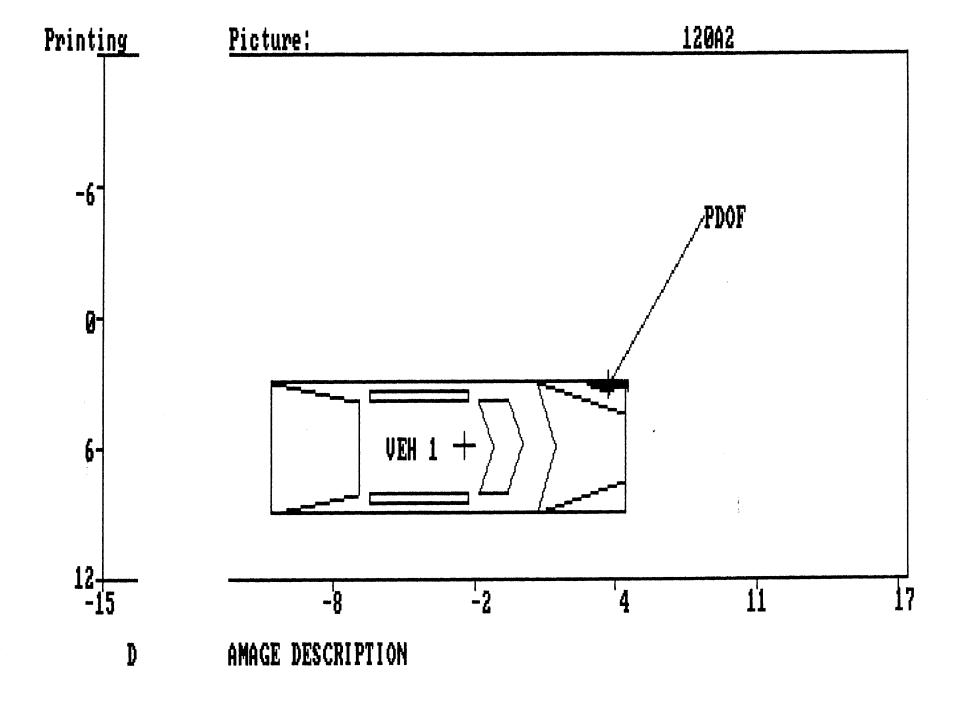
O CM. (

VEHICLE #2

## DIMENSIONS AND INERTIAL PROPERTIES

	 	 	 	 			-		 	 	-	_			-	 	-	 		 	
	 	 	 	 	-	 	-	 	 	 			 	-		 -		 	 	 	

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	130 CM. ( 51 IN.)	127 CM. ( 50 IN.)
CG TO REAR AXLE	141 CM. ( 56 IN.)	127 CM. ( 50 IN.)
TRACK	150 CM. ( 59 IN.)	127 CM. ( 50 IN.)
CG TO FRONT OF VEH	228 CM. ( 90 IN.)	127 CM. ( 50 IN.)
CG TO REAR OF VEH	-270 CM. (-106 IN.)	-127 CM. ( -50 IN.)
CG TO SIDE OF VEH	92 CM. ( 36 IN.)	127 CM. ( 50 IN.)
MOMENT OF INERTIA	12696 KGS ( 27990 LBS)	***** KGS (***** LBS)
VEHICLE MASS	4 KGS ( 8 LBS)	2600 KGS ( 5732 LBS)



# IMPACT #2 BARRIER

## U.S. Department of Transportation CRASHPC PROGRAM SUMMARY

National Highway	Traffic	Safety
Administration		

(All Measurements In Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM

Administration	~· <b>,</b>			CRASHWORTHINES	S DATA SYSTEM
Identifying Title  Primary  Sampling Unit	Case NoStratum		cident Event Da	ate (Month, day, year) of Ri	<b>5</b>
CRASHPC Vehicle Ide	entification 1987	PONTIAC	. Sun	BIRD	03
Vehicle 2	Year	Make		Model	NASS Veh. No.
	G	ENERAL INF	ORMATION ·		
	VEHICLE I			VEHICLE 2	. 1
Size			Size		<u> //</u>
Weight		<b>a</b> .	Weight		
1090+78 + Curb Occupant(s)	Corgo = 176	<u>8</u> kg	Curb Occupant(s)	=	kg
CDC _(	09 L F E	EL	CDC _		
PDOF (-180 to +180		<u>80</u> °	PDOF (-180 to +18	0) +	°
Stiffness		<u>2</u>	Stiffness		
		SCENE INFO	DRMATION		
Rest and Impact Posi	itions [ ] No, Go 7	an ya asag wayatawa 945	Balandaran Baran Baran Balandaran Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran Baran		
	VEHICLE 1	ul la dich 190 certen <del> ze</del> tt en engenen un		VEHICLE 2	
_ Rest	X	. m	Rest	×	. m
Position	Y	· ''' .         m	Position	^	· ''' .           m
	PSI	0		PSI	o
lnoot	X	. m	<u>I</u> mpact	X	. m
Impact Position	^	· ''' . m	Position	^	· ''' .           m
	PSI			PSI	· o
Slip Angle(-180 to +	180)	0	Slip Angle (-180 to	+ 180)	· · ·
		VEHICLE	MOTION		
Sustained Contact	[ ] No [ ] Yes				
,	VEHICLE 1			VEHICLE 2	
Vehicle Rotation	[ ] No	[ ] Yes	Vehicle Rotation	[ ] No	[ ] Yes
	fore Rest [ ] No	[ ] Yes	Rotation Stop Be	efore Rest [ ] No	[ ] Yes
End of Rotation	X	m	End of Rotation	X	. m
Position		· ·'' m	Position	Υ	· · m
	PSI	o		PSI	· · · · · · · ·
Curved Path	[ ] No	[ ] Yes	Curved Path	[ ] No	[ ] Yes
Point on Path	1 1.00	1 1 100	Point on Path	( ),,,	( ) / 20
	m Y <u>-</u>	m		m Y	m
Rotation Direction	[ ] None [ ] CW	[ ] CCW	Rotation Direction	[]None []CW	[ ] CCW
Rotation >360°			Rotation >360°		

FRICTION	INFORMATION	TRAJECTO	RY INFORMATIO	N
Coefficient of Friction		Trajectory Data [	]No [ ]Yes	
Rolling Resistance Opt	·	If No, Go To Damage	Information	
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<del></del>	Vehicle 1 Steer Angle	es	
Vehicle 1 Rolling F	Resistance		° RF	o
LF	RF		° RR	
LR	RR			
		Vehicle 2 Steer Angle	es	
Vehicle 2 Rolling F			° RF	
	RF	LR	° RR	°
LR	RR			0000000000
		Terrain Boundary [	]No [ ]Yes	
		First Point		
		X n	n Y	. m
			· ·	··
		Second Point X m	V	m
		Secondary Coefficien	it of Friction	
	DAMAGE IN	FORMATION		
- VI	EHICLE 1	V	EHICLE 2	
Damage Length	L <u>0 7 2</u> cm	Damage Length	L	cm
Crush Depths	C <sub>1</sub> 002 cm	Crush Depths	C,	cm
	$C_2$ $O$ $O$ cm		C <sub>2</sub>	
	C <sub>3</sub>		C <sub>3</sub>	
	C <sub>4</sub>		C <sub>4</sub>	
	$C_5$ $Q Q 8$ cm		C <sub>5</sub>	cm
	$C_6  Q  O  7  cm$		C <sub>6</sub>	cm
	. 0 2 2 5		_ +	
Damage Offset	D <sup>⊕</sup> <u>205</u> cm	Damage Offset	D ±	cm
IF THIS COMMON IM	PACT WAS WITH A MOTOR VEHICL	E <i>NOT IN TRANSPORT,</i> FILL	. IN THE INFORMATION	BELOW.
Model Year:		The Weight, CDC, Scen	e Data and Damage Ir	nformation
		for this vehicle should t	_	
1				
Complete a	nd ATTACH the appropriate vehic	le damage sketch and dim	nensions to the Form.	

## Y3 IMPACT # 2 BARRIER

#### SUMMARY OF CRASHPC RESULTS USING DAMAGE

#### CRASH3 RECONSTRUCTION

	SPEED CHANGE (DAMAGE)
'EHICLE #1	
TOTAL	3 KPH ( 2 MPH)
LONGITUDINAL	-1 KPH ( 0 MPH)
LATITUDINAL	3 KPH ( 2 MPH)
PDOF ANGLE	-80 DEGREES
ENERGY DISSIPATED =	1691 JOULES ( 1247 FT-LB)
'EHICLE #2	
TOTAL	OKPH (OMPH)
LONGITUDINAL	OKPH ( OMPH)
LATITUDINAL	OKPH ( OMPH)
PDOF ANGLE	O DEGREES
ENERGY DISSIPATED =	O JOULES ( O FT-LB)

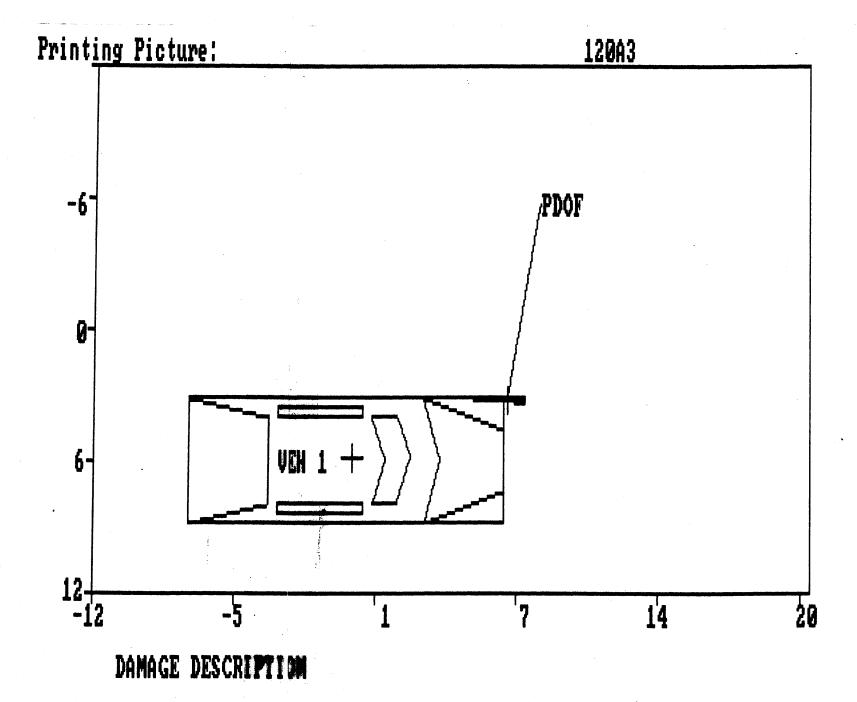
## DIMENSIONS AND INERTIAL PROPERTIES

	VEHICLE #1	VEHICLE #2
	118 CM. ( 46 IN.)	
CG TO REAR AXLE	127 CM. ( 50 IN.)	127 -CM. ( 50 -IN.)
TRACK	139 CM. ( 55 IN.)	127 CM. ( 50 IN.)
CG TO FRONT OF VEH	212 CM. ( 83 IN.)	127 CM. ( 50 IN.)
CG TO REAR OF VEH	-233 CM. ( -92 IN.)	-127 CM. ( -50 IN.)
CG TO SIDE OF VEH	85 CM. ( 34 IN.)	127 CM. ( 50 IN.)
MOMENT OF INERTIA	8962 KGS ( 19757 LBS)	***** KGS (***** LBS)
VEHICLE MASS	3 KGS ( 7 LBS)	2600 KGS ( 5732 LBS)

#### VEHICLE #2

(\* INDICATES DEFAULT VALUE)

SIZE CATEGORY	2	11
STIFFNESS CATEGORY	2	O
VEHICLE WEIGHT	1168 KGS ( 2575 LBS)	***** KGS (2204586 LBS) *
CDC	O9LFEE1	BARRIER
PDOF ANGLE	-80 DEGREES	O DEGREES *
CRUSH LENGTH	72 CM. ( 28 IN.)	0 CM. ( 0 IN.) *
C1	2 CM. ( 1 IN.)	0 CM. ( 0 IN.) *
C2	1 CM. ( O IN.)	0 CM. ( 0 IN.) *
C3	3 CM. ( 1 IN.)	0 CM. ( 0 IN.) *
C4	5 CM. ( 2 IN.)	0 CM. ( 0 IN.) *
C5	8 CM. ( 3 IN.)	0 CM. ( 0 IN.) *
C6	7 CM. ( 3 IN.)	0 CM. ( 0 IN.) *
D	205 CM. ( 81 IN.)	O.CM. ( O IN.) *
D,	216 CM. ( 85 IN.)	0 CM. ( 0 IN.) *



Final

```
49120A0000001 1
                958.0500000000000307410000004
00215700001242608 0508
49120A00010012
49120A00020012
                 958.051000000000102L0221F
                  958.051000000000102L0302L
49120A00030012
49120A00040012
                  958.051000000000302L79000
                  958.051000000000102L63000
49120A01000021
                    8.05 0000000009220009031G1FP23
                                                          301999048096007522912
1321111012991417991189
49120A01000022
                    B.05 00000000101011201410000000000003500900000306B-059+03
44336998207603
49120A01000031
                    8.05 00000000010211LDAW04020310LFEW02292006026054046036004-
042064002008013017011013+19999825025715411000201040801001000
49120A01000041
                    B.05 0000000098310020000212200200122001002610060011100100
49120A01000042
                    8.05 0000000001111432107331120332121331125332125331132331114
33110633111823290000099991900
49120A01010051
                    B.05 00000000031216B0771119000099404111000004211001111011-05
921058812111021523600000000000041100620101000013029011
49120A01010161
                    8.05 0000000001420218640512101
49120A01010261
                    8.05 0000000001441410430512101
49120A01010361
                    B. 05 000000001450252420512101
49120A01010461
                    8.05 0000000001190402122032108
49120A01010561
                    B.05 000000001290602175142100
49120A01010661
                    8.05 0000000001290602125142100
49120A01010761
                    8.05 000000001390602121522100
49120A01010861
                    8.05 000000001790602125142100
                    8.05 000000001290202111701100
49120A01010961
49120A01011061
                    8.05 000000001890402120511101
49120A01011161
                    8.05 0000000001190202120101100
49120A01011261
                    8.05 000000001890402110042100
49120001011361
                    8.05 0000000001890202120511101
49120A02000021
                    B.05 0000000009512461211FTEE1
                                                      999056096007500632
1311111012010166011188
49120A02000022
                    8.05 000000001020212021201400000000009035001003041-027-03
22042998403502
49120A02000031
                    8.05 0000000001019999999
                            17899935117401100401050101001000
                    B.05 0000000000110110000012202202142011011110110111101101
49120A02000041
49120A02000042
                    B.05 000000000
              100000099902100
49120A02010051
                    8.05 0000000001811780821110000004404111000004111001111011-02
49120A02020051
                    B.05 000000002911B30732130000004404111000004000000000000 00
49120A03000021
                    B.05 000000000B722016041G2JR
                                                           000000056096007524412
1411111012010578011198
49120A03000022
                    8.05 00000000101000001090000000000027010000001006-001+00
60017998100302
49120A03000031
                    8.05 00000000020109LFEE01037910LPEW0107200200100300500B007+
205111000002003005002000-001998027\\ 25714000000301040101001000
49120A00000066
                    8.05 00000000CAR/VAN/CAR - RIGHT ANGLE
49120A00000171
                    8.05 00000000Vehicle 1 was traveling north approaching an i
ntersection.
              Vehicle 2 was
49120A00000271
                    8.05 00000000traveling east and vehicle 3 was traveling wes
   At the intersection, the 20A00000371 B.05 000000000front of vehicle 2 impacted the left side of v
49120A00000371
ehicle 1.
          Vehicle 1 continued
49120A00000471
                    8.05 000000000and impacted the left front to the left front
of vehicle 3.
               The LR tire and
49120A00000571
                   8.05 000000000wheel from vehicle 1 seperated from the vehicl
e and impacted the left side of
49120A00000671
                   8.05 00000000vehicle 3. Then the LR hub of vehicle 1 impac
ted a curb on the
49120A00000771
                    8.05 00000000northeast corner of the intersection and came
to rest.
         Vehicles
                  1 & 2 Upr
49120A00000B71
                   8.05 00000000towed andvehicle 3 was driven. The driver of
vehicle 1 was fatally injured.
49120A000001B1
                    B.05 00000000001
                                      Compact
                                                   1992/Chevrolet/Camaro
                                                                           Left
     Severe
                    None
                   B.05 000000000
49120400000281
49120400000381
                   8.05 00000000002 Large Van
                                                   1995/Ford/Econoline
      Unk
                    None
49120A000004B1
                   8.05 000000000
49120A00000581
                    8.05 00000000003
                                      Compact
                                                   1987/Pontiac/Sumbird
     Minor
                   None
49120A00000191
                    8.05 00000000001 Driver
                                             LF
                                                        L&S
                                                                   Aorta
ransec-
         6 Door surface
49120A00000291
                    8.05 000000000
                                                        air bag
ion
49120A00000391
                    B.05 000000000
49120A00000491
                    8.05 00000000002 Driver
                                                        L&S
49120A00000591
                    B.05 000000000
                                                         air bao
49120A00000691
                    8.05 000000000
                                              RF
                                                        L&S
49120A00000791
                    8.05 000000000
49120A00000891
                    8.05 00000000003 Non-tow
```

```
GENERAL VEHICLE Vehicle: 1
 11
 INTRA ERRORS
 OGG2251 2 If ACCIDENT TYPE GV36 equals 20, 24, 28, 44, 45, 51, 65, 69, 71,
             73, 77, 79, 81, 83 or 86-89, then PRE-EVENT MOVEMENT GV31 should
  GG2252
-....GG2253
            _equal 01.
 EXTERIOR VEHICLE Vehicle: 1
 11
 INTRA ERRORS
 OEE1101 2 If LEAKAGE SYSTEM-1 EV43 equals 1, then DAMAGE TANK-1 EV41
  EE1102
             should equal 1, 2 or 6.
 INTERIOR VEHICLE Vehicle: 1
 11
 INTRA ERRORS
 OCCO531 2 ***** THIS CASE SHOWS A DOOR OR HATCH OR GATE OPENING ******
             ***** CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE ******
  000532
             DOOR LEFT FRONT IV05 equals 2 or IV06 equals 2 or IV07 equals 2
  CC0533
  CC0534
             or IVOB equals 2 or IVO9 equals 2.
 OCCUPANT ASSESSMENT Vehicle: 1 Occupant: 1
 11
INTRA ERRORS
 OHH2961 2 If DAMAGE AIR BAG DA43 equals 02-95, then DID AIR BAG FAIL DA34
  HH2962
             should equal 2.
 HH3691 2 If SEAT BACK INCLINE OA53 equals 14, 23, or 31, then SEAT
            PERFORMANCE DA54 should equal 1.
 011
 INTER ERRORS
 OGCO361 2 If BODY TYPE GV07 equals 04-06, 14-16, 20, 21 or 24, then TYPE
             LEFT REAR IV18 should not equal 0. GV=02
 GH0161 2 If TOTAL DELTA V GV59 is greater than or equal to 040, and less
 GH0162
             than 999, then RECORDED INJURIES DA70 should not equal 00.
 GH0163
            GV=02 DA=01
 GH0161
            If TOTAL DELTA V GV59 is greater than or equal to 040, and less
            than 999, then RECORDED INJURIES DA70 should not equal 00.
 GH0162
 GH0163
            GV=02 DA=02
  01
    PSU49
                               ERROR SUMMARY SCREEN
                                                                            96
   CASE 120A
    CURRENT VERSION: 8.05
```

FORM NAME	NUMBER OF DOLLAR SIGNS	NUMBER OF LEVEL 1 ERRORS	NUMBER OF LEVEL 2 ERRORS	VERSION NUMBER CONSISTENT
Accident	o	o	. O	Y
General Vehicle	0	0	1	Υ
Vehicle Exterior	0	o	1	Y
Vehicle Interior	0	0	<b>1</b>	Υ
Occupant Assessment	0	0	2	Υ
Occupant Injury	0	0	o	Υ
Total Inter Errors		o	3	
Total Case Errors	o	o	8	

### **SLIDE INDEX**

Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
1-7	1	N	Pre-impact direction of travel for Vl.
8	1	N	Impact area of Vl with gouge.
9-10	1	N	Post impact direction of travel.
11-13	1	S	Opposite view pre-impact direction of travel.
14	1	S	Opposite view post-impact direction of travel.
15	1	N	View of LR curb impact from Vl at final rest - other marks on island from previous accident.
16-20	2	E	Pre-impact direction of travel.
21	2	W	Opposite view direction of travel.
22-23	2	E	Post-impact direction of travel to final rest.
24.	2	W .	Opposite view post-impact direction of travel.
25-26	3	W	Pre-impact direction of travel.
27	3	E	Opposite view direction of travel.
28-53	1		Exteriors of left front and left side damage.
54	1		View of front bumper cover - pavement marks from bumper folding under vehicle.
55	1		View of filler neck.
56	1		View of extrication mark on LF door.
57	1		View of LR tire and wheel.
58	1		View of LR hub - impacted curb.
59-60	1		Views of hatch latch failure.
61-72	1		Interiors.
73	1		Rear view of left side intrusion.
-74 <b>-</b> 78	1		Views of driver air bag.
79-81	1		Views of small tears in drivers bag.
82-83	1		Views of air bag flaps.
84	1		Scuff on left door handle.
185	1		Hair on left roof side rail.
86	1		Scuffs on shoulder belt.



U.S. Department of Transportation National Highway Traffic Safety Administration

### **SLIDE INDEX**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

		Init Number	4 9 Case Number—Stratum 120A
Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
		·	••
87-94	2		Exterior view of V2 under repair.
95-104	2		Interior views of V2.
105-10	8 2		Views of safety cage and storage shelves.
109-11	2 2		Views of driver air bag.
113	2		View of tether.
114-11	5 2		View of air bag flaps.
116	2		View of altered certification label. (Missing)
117-13	1 3		Exterior views of left front and left side damage to V3.
132	3		View of front bumper - from Vl sliding across bumper and the left front impact.
133	3		View of left side damage to V3 from LR tire and wheel of V3.

































20A (1995) #16







0A (1995) #19























(1995) #3



UA (1995) #31







PSU 49-120A (1995) #34





( (1995) #36









W (1995) #4U





(1000) #



OU (1999) HAS



1 30 40-120M (1003) HH





PSU 49-120A (1995) #46



NA (1995) #47







PSU 49-120A (1995) #50



PSU 49-120A (1995) #51































PSU 49-120A (1995) #66 Best Available



Best Available



PSU 49-120A (1995) #68 Best Available







0A (1995) #71





PSU 49-120A (1995) #73 Best Available



PSU 49-120A (1995) #74 Best Available



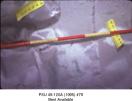




Available



A (1995) #78





PSU 49-120A (1995) #80 Best Available



PSU 49-120A (1995) #81 Best Available









PSU 49-120A (1995) #85 Best Available





PSU 49-120A (1995) #8



PSU 49-120A (1995) #88







PSU 49-120A (1995) #91



1-120A (1995) #9





PSU 49-120A (1995) #94 Best Available



Δvailable







PSU 49-120A (1995) #9 Best Available





PSU 49-120A (1995) #100 Best Available



PSU 49-120A (1995) #101 Best Available



PSU 49-120A (1995) #1 Best Available



OA (1880) # 10





UA (1995) #1



PSU 49-120A (1995) #106 Best Available



PSU 49-120A (1995) #107 Best Available







49-120A (1995) #110 Best Available



Available





PSU 49-120A (1995) #113 Best Available





PSU	NUMBER
CASE	NUMBER

<u>49</u> <u>1204</u>

## SLIDES

THE FOLLOWING SLIDES ARE NOT INCLUDED IN THIS CASE:

SLIDE NUMBER (S) #10



PSU 49-120A (1995) #11



PSU 49-120A (1995) #118



PSU 49-120A (1995) #119



PSU 49-120A (1995) #12











PSU 49-120A (1995) #125



PSU 49-120A (1995) #126







PSU 49-120A (1995) #129 Best Available





PSU 49-120A (1995) #131



